

Duet for Microsoft Office and SAP; SAP Administration Guide

Version 1.00
September 2006

Information in this document, including URL and other Internet Web site references, is subject to change without notice. Unless otherwise noted, the example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation or SAP AG.

Microsoft or SAP may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft or SAP, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2006 Microsoft Corporation. All rights reserved.

© 2006 SAP AG. All rights reserved.

Microsoft, .NET, Exchange Server, MSDN, Office, Outlook, Word, Excel, InfoPath, SQL Server, Visual Studio, Windows, Windows Installer, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world.

All other trademarks are property of their respective owners mentioned herein may be the trademarks of their respective owners.

Table of Contents

Chapter 1: Introduction.....	6
Integrating Business Processes into Microsoft Office	7
Chapter 2: Overview of the Architecture of Duet	9
How Duet Works.....	10
Chapter 3: Duet Administration.....	11
Duet Administration Control Panel	11
Editing Properties of Java Components in Duet.....	12
Define Substitution Text and Messages for Messages from an SAP System	13
Change Language and Locale Properties	14
Change Connection Settings to SAP Systems and Role.....	15
Replace Terminology, Parts of a Message and Symbols	17
Change Settings for the Duet System Landscape	18
Change URLs to Web Services and Duet Resources	19
Change the Protocol for Communication in Duet	21
Define and Map Roles between SAP Systems and Duet Business Applications.....	22
Importing and Uploading XML-Based Configuration Files	24
Managing Resources for Business Applications	24
Add Duet Business Application	25
Remove Duet Business Application.....	25
View Resources of a Business Application.....	25
Modifying Properties of Business Applications at Runtime.....	25
Change Properties and Text for Time Management	26
Change Properties of Reporting Management.....	27
Change Properties of Leave Management.....	29
Change Properties of Budget Monitoring	33
Change Properties of Team Management at Runtime.....	39
Configuring Additional Duet Add-On Hosts	46
Connect Additional Duet Add-On Host to the Duet System Landscape	46
Define Connection Settings to an SAP System.....	46
Map Roles from mySAP ERP System to Roles in Business Applications	47
Connect Additional SAP System to the Duet System Landscape.....	48
Monitoring Duet Environments	50
Enabling the GRMG Monitoring	51
Chapter 4: Security	52
Configuring User Management in the Duet Landscape	52
Configuring User Mapping Data in the User Management Engine.....	53
Configuring the User Mapping Data to use Active Directory	53

Configuring the User Mapping Data in the Same Database as SAP Web AS Java System	56
Authentication in the Duet Landscape.....	59
Configuring the Ticket Issuing System	60
Configuring the Use of Secure Sockets Layer	60
Configuring the Use of SSL and Secure Network Communication	60
Configuring SSL in the Duet Server Host.....	61
Configuring SSL in the Duet Add-On Host	63
Using X.509 Client Certificates.....	65
Managing Credentials and Certificates to Use SSL in the SAP Web AS Java System ...	66
Defining Sequence for Performing Client Certificate Authentication	67
Configuring the Use of Client Certificates for Authentication in Duet	67
Configuring the Host of the Duet Server to use X.509 Authentication.....	68
Configuring Trust in the Duet Landscape	69
Configuring Role Management in the Duet Landscape	70
Assigning Users to mySAP ERP Roles in the User Management Engine	71
Deploying the Duet Role Synchronization Agent.....	72
Chapter 5: Configuring mySAP ERP for Duet Business Applications	75
Preparing mySAP ERP System for Duet.....	75
Remove Previously Installed Support Packages in mySAP ERP.....	75
Configure Support Packages in mySAP ERP to Work with Duet.....	75
Settings for Leave Management.....	77
Defining an RFC Destination for Leave Management	77
Creating a Logical Port for Leave Management	78
Customize Settings for Leave Management.....	79
Schedule Notification Report in Leave Management.....	79
Cleaning Up the Database Tables for Leave Management.....	79
Settings for Team Management	80
Maintaining Employee Authorizations in their Roles in mySAP ERP	81
Verifying Records in Employee Files.....	81
Maintaining Authorization Object for Users	83
Settings for Budget Monitoring	85
Defining an RFC Destination for Budget Monitoring.....	85
Creating a Logical Port for Budget Monitoring.....	86
Releasing the Service Definitions of Enterprise Services Architecture	86
Customizing Alert Messages for Budget Monitoring.....	88
Scheduling the Default Settings for Budget Monitoring	89
Activating the Scheduled Settings in Budget Monitoring	90
Settings for Reporting	91
Defining an RFC Destination for Reporting	91
Creating a Logical Port for Reporting.....	92
Defining the Number Range Interval for Reporting Objects	93
Configuring Communication Destinations for Role Management	93
Settings for Reporting Administration	95

Defining Duet Logical RFC Destination for Reporting Administration	95
Settings for Report Catalogs	96
Creating a Report Category	97
Specifying Report Definitions	98
Configuring the Properties of the Report	101
Setting Default Values for the Report	104
Setting Multiple Values for a Parameter	106
Managing System Timepoints	107
Managing Duet Timepoints	108
Managing Events Data Change for Business Intelligence Reports	110
Managing Report Relations	114
Setting Report Attributes for Duet Business Applications	115
Settings for Pre-Delivered Reports	116
Configuring Pre-Delivered Reports	116
Assigning Rule Violation Reports	116
Defining Triggered Reports	117
Specifying the Rule Violation Types	117
Configuring the Report for the Rule Violation Type	118
Setting Default Values for a Triggered Report	119
Setting Related Reports for a Triggered Report	119
Settings for a Chart Report	119
Defining Settings for the Chart	120
Configuring Default Triggered Reports and Charts for Budget Monitoring	121
Mapping an Actual RFC Destination to the Duet Logical RFC Destination	122
Specifying the Default Role for Preset Triggered Reports	123
Specifying the Default Role for Preset Chart Reports	123
Settings for Time Management	124

Chapter 1: Introduction

Regardless of their size and business, organizations constantly create and use data and information, for instance, about their employees, customers, products, sales, purchases, and their assets, just to name a few.

Information workers in these organizations do not only define the information needed, they know how and where to get it, analyze and understand it, and on the basis of it, make the appropriate decisions within ethical and legal standards.

Information workers get their information from multiple sources, and to work with it, they use a variety of tools such as, paper forms, electronic documents, emails, and spreadsheets.

In their communications and collaboration, large number of these workers uses Microsoft® Office applications, while others use proprietary tools developed in-house.

It is common to find references to business information that exist in enterprise systems within email messages and other documents.

To retrieve and use the same data in their work, workers retype or copy and paste the data or information into the tools that they can conveniently use. These practices are not only error-prone, but also inefficient business processes.

Moreover, key decisions are often delayed and in some cases never made, since the decision makers are unable to make informed decisions because the information they need is trapped within documents or databases in another part of the organization.

Duet™ for Microsoft® Office and SAP® enables information workers to easily access SAP® business processes and enterprise information through Microsoft® Office environments.

Duet is a combination of technologies and applications that empower information workers and decision makers using Microsoft Office applications, such as, Microsoft Office Word®, Microsoft Office Excel®, Microsoft Office Outlook® and Microsoft Office PowerPoint®, to directly access SAP business processes, SAP® data, and information from their existing SAP® systems.

A complete Duet solution or one of its business applications enables information workers to directly access relevant SAP data in the context of the tasks associated with a specific business process from within Microsoft Office Outlook®: email messages, and documents.

Integrating Business Processes into Microsoft Office

A complete Duet solution implements and facilitates the use of specific SAP Business Packages in Microsoft Office:

- Business Package for Employee Self-Service

The Business Package for Employee Self-Service (ESS) enables employees in a company to create, display, and change their own data retrieved from SAP systems.

- Business Package for Manager Self-Service

The Business Package for Manager Self-Service (MSS) provides managers a single point of access to data and information in the SAP system, about their employees and their budgets.

SAP business packages enable a number of business processes, each of which offers one or more business applications: a combination of the tasks performed by an information worker using one or more applications to achieve a business result.

For more information about SAP Business Packages, go to SAP Help Portal at: *help.sap.com* → *Documentation* → *SAP NetWeaver* → *SAP NetWeaver '04* → *SAP Library* → *SAP NetWeaver* → *People Integration* → *Portal* → *Administration Guide* → *Content Administration* → *Business Package Administration*.

From Microsoft Office, you can enable information workers in your organization to use the following Duet business applications:

- Time Management

An SAP® self-service business application that allows employees to view, create and maintain their data for time recording activities in Microsoft Office Outlook.

- Budget Monitoring

An SAP® budget monitoring mechanism that tracks, alerts, and notifies, managers about the status of their budgets.

Managers receive SAP® reports in their Inbox and work with them offline.

This application enables managers to get reports, alerts, and notifications generated in the SAP systems, and to interact with the information.

- Team Management

An SAP® mechanism that is accessible from the contacts list. It provides up-to-date information about employees, open positions, and the organizational structures.

- Leave Management

Allows employees to specify information about their absence, or availability.

Example

On implementing Duet, a line manager at Abacus International Inc., automatically receives email messages because of the activities in the mySAP systems, such as, a request to exceed the allocated budget resources by any of supervisors in his department.

Within the email message is the name of the supervisor, and the details of the budget. When the line manager opens the message in Microsoft Office Outlook, he is able to drill-down to explore the issue.

He selects the name and ID of the supervisor in the email message, and information contextual to the budget of the department opens in an Action pane.

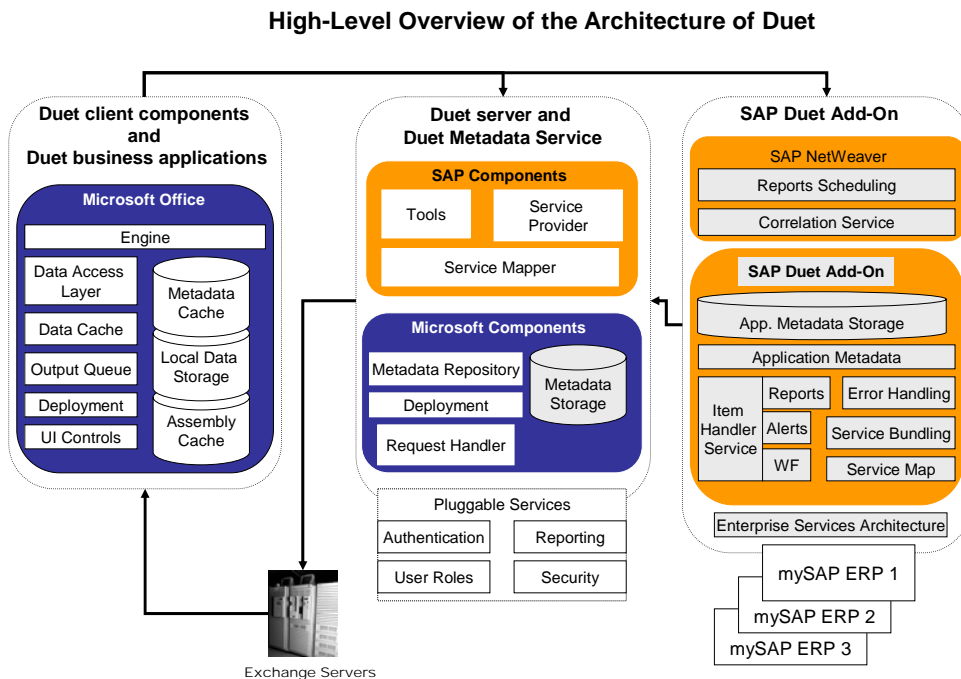
The manager can retrieve information about the supervisor, and details from the financial system, such as, the current budget balance for his entire department, limit of the budget, information about the previous activities of the supervisor regarding the budget.

The manager can interact with the information based on an informed decision, shifting resources to accommodate the changes or rejecting the request outright.

Chapter 2: Overview of the Architecture of Duet

Duet has a multi-tier architecture: a presentation layer consisting of the components to be deployed in the client, a middleware that processes the business logic, and the set of components that interface with the data in SAP systems for the needs of the business logic.

The diagram below illustrates the architecture of Duet:



The following are the components:

- Duet Client Components and Duet Business Applications

The Duet client comprises of the client runtime services, which implement the runtime engine in Microsoft® Office.

Running on top of the runtime engine, are the Duet business applications that implement a variety of business solutions, using services in the Duet server to integrate business processes.

When deployed, the Duet client components enable:

- Various caching of metadata on the local client for the specific user
- Integration with the host Microsoft Office application, such as, Microsoft Office Outlook®, Microsoft Office Excel® and Microsoft Office InfoPath®.
- Loading assemblies from the assembly cache.

- Duet Server and Duet Metadata Service

The Duet server and the Duet Metadata Service serve as a bridge over which Duet business applications use available services and components to retrieve and manage metadata from mySAP™ ERP systems.

- Duet Add-On

The Duet Add-On creates the environment that supports the implemented Duet business applications in Microsoft Office.

The Duet Add-On must be deployed in the existing landscape for mySAP ERP, so that it interfaces with Enterprise Service Architecture (ESA) services, which define how business applications access business objects in SAP systems.

How Duet Works

Duet components extend your reach to existing systems: Microsoft Office applications and mySAP™ ERP systems.

The Duet client components extend Microsoft Office 2003 by allowing Microsoft Office users to work with data and other information coming from mySAP ERP systems.

The Duet Add-On extends the existing mySAP ERP system landscape in which you have the following:

- mySAP™ ERP 2004 SP12 or higher, with ESS/MSS business packages.
- Optionally, SAP Business Intelligence (SAP BW).

The clients running Duet business applications within Microsoft Office connect to the network of computers that run the Duet server, which comprises Web services and the business logic that interfaces with the Duet Add-On in the SAP system landscape.

In addition, Microsoft Exchange Server is needed to connect the following Duet components: Duet business applications, and Duet server.

The Duet business applications, and the Duet server both cache and store some aspects of SAP data on the client, making information available to users even in an offline mode.

When users process and make changes to data from SAP® sources, the changed data is first stored in the client, which submits the data to update the content in the SAP systems. Moreover, alerts and messages can come from the SAP systems to the clients.

Chapter 3: Duet Administration

As the system administrator, you manage and maintain the Duet system landscape from the Duet server host.

Administration of the Duet landscape includes the following:

- Manage the three different environments of Duet: Duet server, Duet Add-On, Duet Business Applications
- Connect additional Duet Add-On hosts to the Duet landscape
- Map SAP system roles to business application roles
- Secure the Duet landscape
- Manage users, groups, roles, and permissions for content in the Duet landscape

Duet Administration Control Panel

Duet Administration Control Panel (DACP) is a browser-based application that provides access to Duet tools and editors. You use these tools and editors to manage, modify, and configure Duet components.

To start the Duet Administration Control Panel:

- You open the DACP using the following URL in your browser:
*http:<J2EE_Duet_Server_Host>:<J2EE_Port>
/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*

Note: You must enter the administrator credentials of the SAP Web AS Java system on which the Duet server runs.

From the DACP, you can open the following:

Tool/Editor	Explanation
Duet System Management	<p>A tool that allows you to configure categories of Java components in the Duet landscape.</p> <p>It displays the properties and values for various categories of Duet components.</p> <p>The settings you specify modify the behavior of the Java components in the Duet landscape.</p>
Define SAP System	<p>A wizard that lets you specify connection information to an SAP system, define roles that exist in that system, and map the roles to default business application roles.</p> <p>In addition, you select the business applications configured for use with the specific SAP system.</p>

Define Add-On	A tool that lets you define the connection settings to an SAP system, and configures connection between the Duet Add-On host and several SAP systems.
Map Role	A tool that lets you define the roles in an SAP system, and map them to the roles of the business application. Use this tool after configuring the connection to an SAP system.
Connect Duet server to Duet Metadata Service Host	A tool that lets you define the logon details for accessing the Authorization Manager service in the Duet Metadata Service host.
Download or Upload Configuration Files	A tool that enables you to download XML-based configuration files for Java components. In addition, it lets you import XML-based configuration files for the Java components in Duet. You can modify, save and load the XML configuration files to modify the behavior of Java components.
Add or Remove Business Applications	A tool that allows you to add, remove and display the resources such as, assemblies, XML, XAML, and graphic files for Duet business applications in the metadata repository.
Business Applications Property Editor	A tool that lets you edit the properties such as, text to be displayed for a control at runtime, and links to specific content, for each Duet business application.

When you select a tool or an editor in the DACP, the selected tool or editor opens in another window.

Editing Properties of Java Components in Duet

You configure categories of Java components and edit their properties using the Duet System Management (DSM) tool.

The DSM provides a visual representation of the properties of Java components in the Duet landscape. You can configure and modify categories of Duet components, by adding values or modifying the values of their properties.

In addition, you save the properties and their values into an XML-based configuration file with the default *SystemAdminConfig.xml*.

Define Substitution Text and Messages for Messages from an SAP System

You can manually define text and messages that serve as substitutes for the ones received from a specific class in mySAP ERP, because of request operations.

To manually define substitute text and messages coming from an SAP system:

1. Start the *Duet Administration Control Panel* using the following URL:
`http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp`

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *Error Handling*.
4. Enter the following:

Property	Description
Error Severity Level	<p>Determine the messages that can be passed on to the user. You can specify the following levels:</p> <p>error: Select to allow only error messages. These indicate that an error has occurred and the application cannot complete the required tasks.</p> <p>warning: Select to allow only warning messages. These indicate that the application has recovered from an anomaly and has completed the required task; however, it needs attention from the administrator.</p> <p>info: Select to allow only info messages. These present messages about tasks that have already been performed.</p> <p>abort: Select to disable the filter, so that no messages are sent to users.</p> <p>We recommend that you filter according to the content of the message.</p>

Mapping Backend messages to User friendly messages	<p>Allows you to map predefined error messages to user friendly messages that you specify.</p> <p>Message: Enter the text or user-friendly message to use as the substitute that displays to user.</p> <p>Backend error class number: The original error message from the SAP Web AS Java system or mySAP ERP system. For example, <i>009</i>. It can take only numeric values. For example, 1.</p> <p>Backend error class name: Class name for the error from mySAP ERP.</p> <p>Language: Supported language in which the message displays.</p> <p>ID: The number that is used as a reference to this table from other tables. For example, 1.</p>
Non Displayed Error Messages	<p>Define the error messages that should not be displayed to users.</p> <p>Message number end range: A number that defines the lower threshold for the list of messages in the class that you specify.</p> <p>Backend error class name: Class name for the error from mySAP ERP. Error Number: 009</p> <p>Message numbers start range: A number that defines the upper threshold for the list of messages in the class that you specify.</p> <p>ID: The number that is used as a reference to this table from other tables. For example, 1.</p>
Backend error class name	<p>Define the class name for the group of messages that you want to make visible to users, or hide them from users.</p> <p>Backend error class name: Specify the error class name as defined in mySAP ERP. For example, <i>HRTIM00REC</i></p> <p>ID: The number that is used as a reference to this table from other tables. For example, 1.</p>

- Click *Save Error Handler Category* to save your changes. *Reset* ignores the changes you have made.

Change Language and Locale Properties

Note: This feature is for future use. English is the only supported language. Do NOT change the current configuration.

Change Connection Settings to SAP Systems and Role

You can manually change information about roles, and access to specific mySAP ERP systems.

Alternatively, you can use the *Define SAP System* wizard, which is also available in the *Duet Administration Control Pane*, to define roles and connection settings to an SAP system.

In addition, you can connect a Duet Add-On host to several SAP systems by defining their connection settings using either the wizard or adding the settings using this tool.

To manually change settings for connecting to an SAP system and its roles:

1. Start the *Duet Administration Control Panel* using the following URL:
`http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp`

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *Service Map*.
4. Enter the following:

Property	Description
Mapping between ERP Systems to ERP Roles	<p>A table that allows you to define the relationship between ERP systems and ERP roles.</p> <p>ERP Role Name (Foreign Key): Specify the foreign key to the ERP role table.</p> <p>System Id (Foreign Key): Specify the foreign key to the ERP system table.</p>
Mapping between ERP Systems to Add-On	<p>A table that allows you to define the relationship between ERP systems and the host of the SAP Duet Add-On.</p> <p>Add-On Id (Foreign Key): Specify the foreign key to the table for the Duet Add-On hosts.</p> <p>System Id (Foreign Key): Specify the foreign key to the ERP system.</p>

ERP Systems	<p>A table that allows you to define records about the ERP systems.</p> <p>Message Server Host: Specify the host name of the Message Server. This specifies the host name of the load balancing server in the SAP system landscape. For example: <i>mylbdevice.sap.com</i></p> <p>Message Server Port: Specify the port number of the Message Server.</p> <p>ERP System name: Specify the name of the ERP system. This is the ID of the SAP system, to which you want to connect. For example: <i>OSS</i></p> <p>ERP Port: Specify the port number of the ERP system.</p> <p>ERP Host name: Specify the host name of the ERP system. This specifies the host name of the SAP system. For example: <i>myfinance.sap.com</i></p> <p>ERP System log group: Specify the logon group of the ERP system. This specifies the logon group for the load balancing server of the SAP system. For example: <i>PUBLIC</i></p> <p>System ERP number: Specify the system number of the ERP system. For example: <i>00</i></p> <p>System Id: Specify the name of the ERP system. This is the ID of the SAP system, to which you want to connect. For example: <i>OSS</i>.</p> <p>ABAP Client Id: Specify the ID of the client in the ERP system. This specifies the client number of the SAP System that you want to connect to. For example: <i>001</i></p>
-------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Mapping between ERP Systems to Business applications	<p>A table that allows you to define the relationship between ERP systems and Duet business applications.</p> <p>ERP Master Indicator (0 or 1): Specify 1 to indicate that the SAP system is a master system, which is used for reporting administration. 0 indicates it is not used for reporting.</p> <p>RFC destination name: Specify the name of the RFC destination to create in the SAP Web AS Java system.</p> <p>System Id (Foreign Key): Specify the foreign key to the table for the ERP systems.</p> <p>Business application name: Specify the abbreviated name of the Duet business applications in the category column:</p> <ul style="list-style-type: none"> • BUMO-Budget Monitoring • LEMA-Leave Management • TEMA-Team Management • REMA-Report Management • TIMA-Time Management
Add-Ons	<p>A table that allows you to specify records about the SAP Web AS Dual Stack (J2EE + ABAP) hosts.</p> <p>Java Add-On SSL Port: Specify the port number of the SSL connection in the SAP Web AS Java system.</p> <p>ABAP Add-On Port: Specify the port number of the SAP system.</p> <p>Java Add-On Host: Specify the name of the Duet Add-On host.</p> <p>Java Add-On Port: Specify the HTTP port number of the Duet Add-On host.</p> <p>ABAP Add-On Host: Specify the name of the SAP system host.</p> <p>Java Add-On Id: Specify a key for this table.</p>

5. Click *Save Service Map Category* to save your changes. *Reset* ignores the changes you have made.

Replace Terminology, Parts of a Message and Symbols

You can define texts to substitute for terminology, in parts of a message, and specific symbols, used in mySAP ERP. The substituted text is presented to users in Microsoft Office Outlook.

To define text substitutes in messages:

1. Start the *Duet Administration Control Panel* using the following URL:
<http://<Duet Server Host Name>:<J2EE HTTP PORT>>

*/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *Text Replacement*.
4. Enter the following:

Property	Description
Text Replacement	Specify the substitution text for terminology coming from an SAP system.
Business application name:	Specify the Duet business application for which you want to enable the substitution.
Target Text Language	Specify the language in which to display the substitute text to the user.
Source Text	Specify the language in which the original text displays in mySAP ERP for the user.

5. Click *Save Text Replacement Category* to save your changes. *Reset* ignores the changes you have made.

Change Settings for the Duet System Landscape

You can manually change the settings for the hosts of Duet components when you relocate the Duet server components or Master Duet Add-On components in a different host.

To change the URL addresses to Web services:

1. Start the *Duet Administration Control Panel* using the following URL:
*http://<Duet Server Host Name>:<J2EE HTTP PORT>
/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *System Landscape*. The defined settings display.

4. Enter the following:

Property	Description
Metadata Service Host Name:	Specifies the host name of the Duet metadata service. For example, <i>Duetmetadata</i> .
Master Add-On Load Balancer Host Name:	Specifies the host name of the Master Duet Add-On in which the metadata repository resides.
Master Add-On Load Balancer HTTP Port:	Specifies the port number of the load balancing device in the Duet Add-On environment.
Master Add-On Load Balancer HTTPS Port:	Specifies the secure port number (https port) of the load balancing device in the Duet Add-On environment.
Duet Server Load Balancer Host Name:	Specifies the host name of the load balancing device in the Duet server environment.
Duet Server Load Balancer HTTP Port:	Specifies the port number (http port) of the load balancing device in the Duet server environment.
Duet Server Load Balancer HTTPS Port:	Specifies the secure port number (https port) of the load balancing device in the Duet server environment.

1. Click *Save System Landscape Category* to save your changes. *Reset* ignores the changes you have made.

Change URLs to Web Services and Duet Resources

You can manually change the URL addresses to Web services and other Duet resources through the Duet Administration Control Panel.

When you relocate the Duet server components or Duet Add-On components to a different host, you must change the URL addresses for the Web services and Duet components:

- Metadata Publisher is a tool with which you configure the services that allow clients to access XML documents, with which they render user interface elements among other things.
- Service Mapper configures the services that enable clients to access other Web services.
- Ticket Issuer is the mechanism that issues SAP logon tickets to clients for single sign-on in the Duet landscape.
- DLL Read path points to the shared folder *DeutCode*, to be accessed by clients.
- DLL Write path points to the shared folder, *DeutMetadata*, to be accessed by clients. Note that based on your system landscape configuration, the pathname may be the same as the path for DLL Read Path.

DLL write path points to the shared folder *DuetMetadata*, as accessible from the location of the client. According to the landscape configuration, this may be similar or other than the DLL Read Path.

- WSR trigger interval specifies the maximum interval at which white space records will be created for users at runtime.

To change the URL addresses to Web services:

1. Start the Duet System Management, using the following URL: *http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~systemadmin~ui~webdynpro/SystemAdminUIFrameworkAppaa*

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select the category *Service Provider*. The defined URL addresses display.
4. Enter the following:

Property	Description
Metadata Publisher URL:	<p>Specifies the URL address of the metadata publishing tool to allow clients to access XML documents, with which they render user interface elements among other things. For example:</p> <p><i>http://<deut_metadata_service_host>:<http_port>/MetadataPublisher/Config1?style=document</i></p> <p>To obtain the URL of a Web service:</p> <ol style="list-style-type: none"> 1. From the SAP Web AS Java system host in which you deployed the Duet Add-On. The URL is: <i><J2EE_Host>:<http_port>/index.html</i> 2. For example: <i>localhost:52000/index.html</i>, or <i>127.0.0.1:50000/index.html</i> 3. Choose <i>Web Service Navigator</i>, and then move the pointer on to the Web service to be configured. For example, <i>MetadataPublisher</i>. <p>The exact URL of the Web service displays in the status bar of the browser.</p>
Service Mapper URL:	<p>Specifies the URL address to the service that enables clients to access other Web services of the mapping component in the Duet server environment. For example:</p> <p><i>http://<deut_metadata_service_host>:<http_port>/ServiceMapperImplWS/Config1?style=document</i></p>
Ticket Issuer URL:	<p>Specifies the URL address of the host of the ticket issuer. For example,</p> <p><i>http://duet.server.sap.corp:50000/osp/ticketissuer</i></p>

DLL Read path (including trailing slash):	Specifies the shared pathname in the Duet Metadata service host, in which the resources (such as DLL files, graphics files, Help) are accessible by clients running Duet business applications. For example, <code>\\duet_metadata_host\DuetCode\</code>
DLL Write path (including trailing slash):	Specifies the shared pathname in the Duet Metadata service host, into which the DLL files for business applications to be trusted are copied. For example, <code>\\duet_metadata_host\DuetMetadata\</code>
WSR trigger interval:	Specifies a number which defines the maximum interval at which white space records will be created for users at runtime.

4. Click *Save Service Provider Category* to save your changes. *Reset* ignores the changes you have made.
5. Go to the *Duet Administration Control Panel*, and select the category *Add or Remove Business Applications*.
6. Choose *Force Metadata Regeneration*. All the manual changes you made are applied to the Duet components.
7. From the Duet Metadata Service host, publish the metadata for the Duet business applications using the metadata publishing tool in the folder:
`C:\Inetpub\DuetServiceProvider\bin`
8. Find the XML file *DuetMetadata.xml*, in the folder: `C:\Duetmetadata`
9. At the command line, change directory to folder: `C:\Inetpub\DuetServiceProvider\bin`
10. Type the following: `Microsoft.Duet.Tools.DeployMetadata.exe copyftos C:\Duetmetadata\DuetMetadata.xml`

Note: Before you republish the metadata, clean the metadata service host, using the following command: `Microsoft.Duet.Tools.DeployMetadata.exe clean`

Change the Protocol for Communication in Duet

You can manually change the secure type settings applicable to Duet components through the *Duet System Management*. The default protocol type is http.

When transitioning to a productive system landscape, we recommend that you implement SSL and https settings. After configuring the landscape to use SSL, you manually set the applicable protocol to https.

To define and map roles between business applications and mySAP ERP:

1. Start the *Duet Administration Control Panel* using the following URL:
`http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp`

Where *<Duet Server Host Name>: <J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *Security*.
4. In *HTTP Client-Server Protocol (http/https)*, select the protocol to use for communication by Duet components. For example, *http*.
5. Click *Save Security Category* to save your changes. *Reset* ignores the changes you have made.

Define and Map Roles between SAP Systems and Duet Business Applications

You can manually define and map the default roles of the Duet business applications to roles in mySAP ERP through the Duet Administration Control Panel.

To define and map roles between business applications and mySAP ERP:

1. Start the *Duet Administration Control Panel* using the following URL:
`http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp`

Where *<Duet Server Host Name>: <J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Select *Duet System Management*, and select the category *Role Management*. A list of mapped roles display.
4. Enter the following:

Property	Description
Windows Domain Setup (Email/Single/Multiple):	Enter the domain name, or email server name. Specify whether you are using multiple domains, a single domain, or email server for users.
Windows Domain (only for Single Domain setup):	Specify the domain name. For example, <i>sap.microsoft.duet</i>
Copy Role Assignments to AzMan	<p>Copies roles from an SAP system and business applications that have been mapped and synchronized from the UME in the same host as the Duet server to AzMan.</p> <p>Use whenever you re-install a business application, and publish its metadata to the Duet Metadata Service host.</p>

Activate ERP Role Synchronization:	Click to start role synchronization between ERP roles and Duet roles.
Activate Portal Role Synchronization:	Click to start role synchronization between SAP NetWeaver® Portal roles and Duet business applications roles.
Roles mapping table	<p>Define the relationship between Duet business application roles table and mySAP ERP system roles table.</p> <p>Click <i>Add Row</i> to enter new values.</p> <ul style="list-style-type: none"> • Mapped ERP or Portal Role: Specify the foreign key to the ERP or portal role table. • Application Role: Specify the foreign key to the Duet business applications roles table.
External roles	<p>Define records of the roles from the SAP NetWeaver Portal, and ERP systems.</p> <p>Click <i>Add Row</i> to enter new values.</p> <ul style="list-style-type: none"> • Portal HTTP Host:Port: Specify the portal host and port number. Applicable only if you are using a role from the portal. • Role ID: Specify the full name of the ERP role or the portal role. It is in the format: ERP_SYSTEM.CLIENT.ROLE, or PORTAL_MESSAGE_SERVER_HOST.PORT.ROLE, where ERP_SYSTEM.CLIENT, or PORTAL_MESSAGE_SERVER_HOST is the name of the ERP system or the message server host of the portal. CLIENT is the ABAP client number of the ERP system, or in case of the portal, this is the portal http port number, and role is the name of the role. • ERP or Portal: Specify ERP if the role is an ERP role. Specify Portal if the role is a portal role. • Synchronized: Specify true to enable role synchronization for the role. False disables synchronization for the role. <p>Note: Always select true to enable synchronization between the roles from the SAP system and the business application roles.</p>

5. Click *Save Role Mapping Category* to save your changes. *Reset* ignores the changes you have made.
6. Go to the *Duet Administration Control Panel*, and select the category *Add or Remove Business Applications*.
7. Choose *Force Metadata Regeneration*.

Importing and Uploading XML-Based Configuration Files

In addition to the visual representation of the categories for configuring various components in the Duet landscape, Duet provides an XML-based configuration file for configuring and modifying the Duet components, which use various metadata and data stored in database tables.

The content of each category, mainly properties and their values, can generated into an XML file, which you can modify and deploy through the *Download or Upload Configuration Files*, in order to apply the changes.

To import an XML configuration file:

1. Start the *Duet Administration Control Panel*, and click *Download or Upload Configuration Files*.
2. Click *Download Current Configuration to a File* to generate an XML configuration file contains the updated data in the database.
3. Give the file a name, and save it to your local drive.

You can deploy updated XML files for Duet components into the Duet landscape using the *Download or Upload Configuration Files*.

To export XML files for Duet:

1. Click *Download or Upload Configuration Files*.
2. Choose *Browse* to select the XML file that you want to deploy.
3. Click *Upload*. A message displays when the operation is completed.
4. Close the browser to exit the tool.

Managing Resources for Business Applications

You can configure and maintain resources for Duet business applications, as well as customize the properties for the installed business applications, using the following:

Property	Description
Add or Remove Business Applications	The Add or Remove Business Applications tool allows you to add Duet business applications to the metadata repository, remove business applications from the metadata repository, and to view the resources such as, graphic and binary files of the selected business application.
Business Applications Property Editor	Edit properties of business applications, such as, changing the name of a property, defining URL addresses to link to, hiding or displaying controls to users in Microsoft Office Outlook.

Add Duet Business Application

The Add or Remove Business Applications tool allows you to deploy compressed files that do not contain subfolders to the metadata repository. The compressed file can contain XML, XIN, assemblies (DLLs), and DIN file types.

The appropriate Duet components can access and use these resources in the metadata repository.

To deploy metadata to the metadata repository:

1. Start the *Duet Administration Control Panel*, and click *Add or Remove Business Applications*.
2. Enter the administrator credentials of the SAP Web AS Java system on which the Duet server runs.
3. Locate the folder that contains the compressed file you want to deploy.
4. Click *Add*. The resources in the metadata repository display.

Remove Duet Business Application

You can delete all the content, or only some of the content in the metadata repository for a specific business application.

To delete resources of a Duet business application:

1. In the *Add or Remove Business Applications* editor, select the business application from the list box. The resources for the selected business application display in the appropriate table.
2. Click *Remove*.

Note: During deployment, any XML and DLL file that does not have a corresponding XIN or DIN file type is not deployed, and vice versa.

View Resources of a Business Application

From the Add or Remove Business Applications editor, you can view and select resources of Duet business applications that have been deployed into the metadata repository.

To view the resources of a Duet business application:

- In the *Add or Remove Business Applications* editor, select the business application from the list box. The resources for the selected business application display in the tables.

The tables show resources of the selected business application, including the relevant binary files. For example, *DLL* files.

Modifying Properties of Business Applications at Runtime

Using the Business Applications Property Editor, you can modify metadata at runtime. The change you make displays to users in their subsequent request for the same content.

Logon to the Business Applications Property Editor using the administrator user ID defined in both the host of the Duet Add-On and in the SAP system.

In the editor, you can expand the tree structure, *Duet*, to display the names of the installed business applications. When you expand a business application, you can select the property you want to change.

For instance, you can change the text item on a control at runtime. For example, you can change the name of a button from *Customer* to *Client*.

The following sections describe the various properties and text items that can be modified in each business application. Expand the node for the specific business application, and select the property with the text item you want to change.

Change Properties and Text for Time Management

For time management, you can edit text and change labels for various controls, and specify URL addresses to content on the Web or a portal.

To change properties and text items for time management:

1. Start the *Duet Administration Control Panel*, and click *Business Applications Property Editor*.
2. Enter the administrator user ID for logging on to the host of the SAP Duet Add-On. The same user ID must also be available in the SAP system as a system user.
3. Double click *Duet* on the left, to expand it. A cascaded tree with the names of the installed business application displays.
4. Select *Time Management*. On the left side, a table of the customized parameters generated for the business application displays.
5. Enter the following:

Properties	Explanation
Time Analytics	<p>You can change the label that displays to the user:</p> <ul style="list-style-type: none">• Time Per Project: In TimePerProject Label, enter the replacement text to display for the property. For example, change <i>Time per project (hours)</i> to <i>Project Duration (Hours)</i>.
You Can Also	<p>You can change the label that displays to the user:</p> <ul style="list-style-type: none">• Help Link Label: Specify the text for the link to the help file.• Links: In the table, define the properties for the link. <p>Enabled?(True/False): Enter <i>True</i> to make the text for the link and the link available to the user. If you enter <i>False</i>, the text and the link will not be available.</p> <p>Link Label Name (Unique for proper rendering): Specifies the current text that displays for the link.</p>

	<p>URL Location: Specify a number that defines whether the link is the first, second or third link.</p> <p>Text: Specifies the text that replaces the current text for the link.</p> <p>ToolTip: Specifies the alt text that displays when the mouse hovers over the text for the link.</p> <p>Position: Specifies the position of the link.</p> <p>Visible?(True/False): Enter <i>True</i> to display the text to the user. False allows you to hide the text from users.</p> <p>Options Link Label: Specify the text for the link that opens the Option dialog box.</p>
Time Tracking	<p>You can change the label that displays to the user:</p> <p>Time Tracking Links: Enter the text for the links.</p> <p>Time Tracking Details: Enter a label for the control for the project codes.</p> <p>Header: Enter a name for the time tracked control.</p>
AutoFill Settings	<p>You can change the label that displays to the user:</p> <ul style="list-style-type: none"> • Information Label: Enter the explanation for the values in this region of the screen. • Find Project Code Link: Enter the text for the link to searching for project code. • Project Code Label: Enter a name for the project code box. • Title: Enter the heading text for this region of the windows.
Selection Details	<p>You can change the label that displays to the user:</p> <ul style="list-style-type: none"> • Time Tracked Label: Specify a name for the box for time tracking.

6. Click *Save* to save the changes.

Note: Press *F5* to refresh the page.

Change Properties of Reporting Management

For reporting management, you can edit text, change labels for various controls, and specify URL addresses to content on the Web or a portal.

To change properties and text items for reporting management:

1. Start the *Duet Administration Control Panel*, and click *Business Applications Property Editor*.

2. Enter the administrator user ID for logging on to the host of the SAP Duet Add-On. The same user ID must also be available in the SAP system as a system user.
3. Double click *Duet* on the left, to expand it. A cascaded tree with the names of the installed business application displays.
4. Select a Reporting Management. On the left side, a table of the customized parameters generated for the business application displays.
5. Enter the following:

Properties	Explanation
Reports	<p>Action Pane Change Personalized: Specify a name for the control that allows changes to the personalized template which generated this report.</p> <p>Action Pane Report Properties: Enter a name for the properties of a report that can be changed.</p> <p>Action Pane Run: Enter a label for running a report again.</p> <p>Action Pane Send Report: Enter a label for sending a report to someone else.</p> <p>Action Pane Excel: Enter a name for opening a report in Microsoft Office Excel.</p> <p>Action Pane Subscribe: Enter a label for the control for subscribing a report.</p>
Catalog	<p>Action Pane Run Report: Specify the label for the control to run the report.</p> <p>Action Pane base Personalized: Specify a label for control for defining a report template.</p> <p>Action Pane Subscribe Report: Specify a label for the control for subscribing e report.</p>
Personalized Template	<p>Action Pane Run Report: Enter a label for the control that runs the report.</p> <p>Action Pane Open Catalog template: Specify a label for the control that opens the report catalog.</p> <p>Action Pane Subscribe Report: Specify the label for the control that starts the subscription for a report.</p> <p>Action Pane Base Personalized: Specify a label for the control for personalizing the report.</p>
Template	<p>YouCanAlso Report Guidelines: Specify the URL addresses for links, and the text for each link you want to enable from the application to the Web.</p> <p>URI Location: Enter the URL address.</p>

	YouCanAlso Email Owner: Enter a label for the control that triggers emails to be sent to the contact person that sends reports.
--	----------------------------------------------------------------------------------------------------------------------------------------

6. Click *Save* to save the changes.

Note: Press *F5* to refresh the page.

Change Properties of Leave Management

For leave management, you can edit text and change labels for various controls, and specify URL addresses to content on the Web or a portal.

To change properties and text items for leave management:

1. Start the *Duet Administration Control Panel*, and click *Business Applications Property Editor*.
2. Enter the administrator user ID for logging on to the host of the SAP Duet Add-On. The same user ID must also be available in the SAP system as a system user.
3. Double click *Duet* on the left, to expand it. A cascaded tree with the names of the installed business application displays.
4. Select a Leave Management. On the left side, a table of the customized parameters generated for the business application displays.
5. Enter the following:

Properties	Explanation
Leave Approve Dialog	<p>Approver Notes Heading: Specify a label for the heading for approver notes.</p> <p>Leave Type Heading: Specify a label for the heading of the type of leave.</p> <p>Approve Button Text: Specify a label for the approve button.</p> <p>Approve Button Tip: Specify text for the button tooltip.</p> <p>Cancel Button Tip: Specify the tooltip text for the cancel button.</p> <p>Cancel Button Text: Specify text for the cancel button.</p> <p>Approver Notes Tip: Specify the tooltip text for approver notes.</p> <p>Employee Name Description: Specify a label for description.</p> <p>Date Description: Specify a label for date description.</p>
Requester Task Header Region	<p>Tool Tip for Leave Type Desc: Specify a label for tooltip description.</p> <p>Approver Name Desc: Specify a label for description of the approver name.</p> <p>Request status Tool Tip: Specify the tooltip text for the status.</p>

	<p>Tool tip for date Label: Specify a label for date.</p> <p>Leave Type Desc: Specify a label for the description of the type of leave.</p> <p>Tool Tip for Approver Desc Label: Specify the tooltip text for the approver decryption.</p> <p>Date Desc: Specify a label for the description of the date.</p> <p>Request Status Desc: Specify a label for the description for the request status.</p>
Requester Header Region	<p>Leave Type Lable Tool Tip: Specify the tooltip text for the type of leave.</p> <p>Request Status Tool Tip: Specify the tooltip text for the request status.</p> <p>Search String Syntax Description: Specify a label for the description of the search string.</p> <p>Approver Tool Tip: Specify the tooltip text for the approver.</p> <p>Search Button Tool Tip: Specify the tooltip text for the search button.</p> <p>Date Description: Specify a label for the description of the date.</p> <p>Employee Name Description Tool Tip: Specify the tooltip text for the description of employee name.</p> <p>Search Button Text: Specify a label for the search button.</p> <p>Date Description Tool Tip: Specify the tooltip text for the description of the date.</p> <p>Approver Name Desc: Specify the description label.</p> <p>Request Status Description: Specify the description label.</p> <p>Employee Name Description: Specify the description label.</p> <p>Leave Type Desc: Specify the description of the type of leave.</p>
Approver Mail	<p>Documents Region: In the table, you can modify the text for links:</p> <p>Link Enabled? (True/False): Specify <i>True</i> to enable the link, <i>false</i> disables the link.</p> <p>Name of the Link Label (Must be Incremental): Specify a label for the link. For example, <i>View Leave Requests</i>.</p> <p>Location of the Document: Specify the URL address of the document.</p> <p>Text to be displayed: Specify the text to display. For example, <i>View Leave Requests</i>.</p>

	<p>Tool Tip: Specify the tooltip text.</p> <p>Link Visible? (True/False): Specify <i>True</i> to make the link available to users. <i>False</i> hides the link.</p> <p>You Can Also Region: In the table, you can modify the text to be displayed in the area defined for <i>You Can Also</i> content:</p> <p>IsEnabled (True/False): Specify <i>True</i> to enable the region. <i>False</i> to disable it.</p> <p>Name of the link label: Specify a name for the region. For example, <i>View Leave Requests</i>.</p> <p>URL to open: Specify the URL address.</p> <p>Text of the link label: Specify the text for the link. For example, <i>http://<portal_host>:<portal_port>/irj/portal/?NavigationTarget=ROLES://portal_content/com.sap.pct/every_user/com.sap.pct.ess.employee/com.sap.pct.ess.pages/com.sap.pct.ess.area_working_time</i></p> <p>Tooltip text IsEnabled(True/False): Specify <i>True</i> to enable tooltips in the region. <i>False</i> disables tooltips.</p> <p>Header Region</p> <p>Request Status Description: Specify a label for description.</p>
Leave Reject Dialog	<p>Reject Button Tip: Specify the tooltip text for the reject button.</p> <p>Cancel Button Text: Specify a label for the cancel button.</p> <p>Approver Notes Heading: Specify the heading for approver notes.</p> <p>Approver Notes Tip: Specify the tooltip text for the approver notes.</p> <p>Reject Button Text: Specify a label for the reject button.</p> <p>Employee Name Description: Specify the description label.</p> <p>Date Description: Specify the description label.</p> <p>Leave Type Heading: Specify the heading for type of leave.</p> <p>Cancel Button Tip: Specify the tooltip text for the cancel button.</p>
Restore Options Dialog	<p>OK Button Tool Tip: Specify the tooltip text for the OK button.</p> <p>Cancel Button Text: Specify a label for the cancel button.</p> <p>Cancel Button Tool Tip: Specify the tooltip text for the cancel button.</p> <p>OK Button Text: Specify a label for the OK button.</p>
Approver Task	<p>Documents Region: In the table, you can modify the text to be displayed in the area defined for approver task content:</p>

	<p>Link Enabled? (True/False): Specify <i>True</i> to enable the link, <i>False</i> disables the link.</p> <p>Name of the Link Label (Must be Incremental): Specify a label for the link.</p> <p>Location of the Document: Specify the URL address for the document.</p> <p>Text to be displayed: Specify the text to display.</p> <p>Tool Tip: Specify the tooltip text.</p> <p>Link Visible? (True/False): Specify <i>True</i> to make the link available to users. <i>False</i> hides the link.</p> <p>You Can Also Region: In the table, you can modify the text to be displayed in the area defined for You Can Also content:</p> <p>IsEnabled (True/False): Specify <i>TRUE</i> to enable the region. <i>False</i> does not make the link available.</p> <p>Name of the link label: Specify a label for the link.</p> <p>URL to open: Specify the URL address.</p> <p>Text of the link label: Specify the text for the link.</p> <p>Tooltip text: Specify text for the tooltip.</p> <p>IsEnabled(True/False): Specify <i>True</i> to enable tooltips in the region. <i>False</i> disables the tooltips.</p> <p>Header Region</p> <p>Request Status Description : Specify a label for the property, description.</p>
Requester	<p>Documents Region: In the table, you can modify the text to be displayed in the area defined for requester content:</p> <p>Is Enabled?(True/False): Specify <i>True</i> to enable the region.</p> <p>Name of the Labe (Must be unique): Specify a unique name for the label.</p> <p>Location of the document: Specify the URL address of the document.</p> <p>Display Name: Specify the name to be displayed.</p> <p>ToolTip Is Visible?(True/False): Specify <i>True</i> to enable tooltips. <i>False</i> disable tooltips.</p> <p>You Can Also Region</p> <p>IsEnabled (True/False): Specify <i>True</i> to enable the region.</p> <p>Name of the Link Label(Must be Unique): Specify a label for the</p>

	<p>link.</p> <p>URL of the Link: Specify the URL address.</p> <p>Description of the Link: Specify the text for the link.</p> <p>Tooltip text: Specify text for the tooltip.</p> <p>Is Visible?(True/False): Specify True to make the region available to users. False hides the region.</p>
Options Dialog	<p>Restore Options Heading Label Tool Tip: Specify the tooltip text.</p> <p>Restore Button Text: Specify a label for the button.</p> <p>Restore Options Heading: Specify the heading.</p> <p>Restore Lable Tool Tip: Specify the text for the tooltip.</p> <p>Restore Description: Specify a label for description.</p> <p>Restore button Tool Tip: Specify the tooltip text.</p>

- Click *Save* to save the changes.

Note: Press *F5* to refresh the page.

Change Properties of Budget Monitoring

For budget monitoring, you can edit text, and change labels for various controls, and specify URL addresses to content on the Web or a portal.

To change properties and text items for budget monitoring:

- Start the *Duet Administration Control Panel*, and click *Business Applications Property Editor*.
- Enter the administrator user ID for logging on to the host of the SAP Duet Add-On. The same user ID must also be available in the SAP system as a system user.
- Double click *Duet* on the left, to expand it. A cascaded tree with the names of the installed business application displays.
- Select *Budget Monitoring*. On the left side, a table of the customized parameters generated for the business application displays.
- Enter the following:

Properties	Explanation
IO Critical Variance	<p>Actions Region: Select and specify the following:</p> <p>Change Alert Properties Link Text: Specify the text for the link.</p> <p>Perform BM Transfer Link Visibility: Specify true to make the link available. False hides it.</p> <p>Change Alert Properties Link Visibility: Specify true to make the link available. False hides it.</p>

	<p>Request BM Adjustment Link Text: Specify the text for the link.</p> <p>Additional Links Region: Select to modify:</p> <p>Set BM Options Text: Specify the text for the options.</p> <p>View Document Link Visibility: Specify true to make the link available. False hides it.</p> <p>Get BM Help Text: Specify text for activating the help information.</p> <p>View Document Link Text: Specify the text for the link.</p> <p>Manage BM Rules Text: Specify the text for activating management of rules.</p> <p>View Document Link Location: Specify the URL address for the link.</p> <p>Header Region: Select to modify the following:</p> <p>Alert Status Label Text: Specify a label for the status.</p> <p>Internal Order Label Text: Specify a label for internal order.</p> <p>Posting Label Text: Specify a label for posting.</p> <p>Posting Date Label Text: Specify a label for the posting date.</p> <p>Chart Region: Select to modify the following:</p> <p>Chart Warning Message: Specify the warning message for the chart.</p>
CP Alert Properties Dialog	<p>Button OK Caption: Specify a label for the OK button.</p> <p>Check Box Email Summary Text: Specify a label for the checkbox email summary.</p> <p>Workflow change Label Text: Specify a label for the workflow change.</p> <p>Button Cancel Caption: Specify a label for the cancel button.</p> <p>Dialog Header: Specify a label for dialog header.</p> <p>Alert Summaries Group Header Text: Specify a label for alert summaries group header.</p> <p>Condition Label Text: Specify a label for condition.</p> <p>Currency Label Text: Specify a label for currency.</p> <p>Radio Button 1 Text: Specify a label for the radio button.</p> <p>Rule Threshold Group Header Text1 Text: Specify a heading for rule threshold group.</p> <p>Radio Button 2 Text: Specify a label for the radio button.</p> <p>Send Alert Label Text: Specify a label for send alert.</p> <p>Rule Submitted Message: Specify a label for rule submitted message</p> <p>Rule Type Label Text: Specify a label for rule type.</p> <p>Rule Name Label Text: Specify a label for the rule.</p> <p>Rule Threshold Message: Specify a label for rule threshold message.</p> <p>Amount Label Text: Specify a label for amount.</p>

	<p>Triggered Reports Label Text: Specify a label for triggered reports.</p> <p>Trigger Report Properties Button Text: Specify a label for trigger report properties button.</p> <p>Triggered Reports Group Header Text: Specify a heading label for triggered reports group.</p>
IO Critical Posting	<p>Actions Region: Select and specify the following:</p> <p>Change Alert Properties Link Text: Specify a label for change alert properties.</p> <p>Request Posting Adjustment Link Text: Specify a label for request posting adjustment. For example, <i>Request Posting Adjustment Link Location</i>.</p> <p>Request Posting Adjustment Link Visibility: Specify true to make the link text visible for request posting adjustment. False hides the link.</p> <p>Request Budget Adjustment Link Text: Specify the text for the link for request budget adjustment. For example, <i>http://<portal_host>:<portal port>/irj/portal/?NavigationTarget=ROLES://portal_content/com.sap.pct/line_manager/com.sap.pct.mss.manager/com.sap.pct.mss.iviews/com.sap.pct.mss.fin/com.sap.pct.mss.fin.lineitemmonitor_c</i></p> <p>Request Budget Adjustment Link Location: Specify a label for request budget adjustment.</p> <p>Request Posting Adjustment Link Location: Specify a label for request posting adjustment.</p> <p>Change Alert Properties Link Visibility: Specify true or false. True makes the label visible for the link. False hides it.</p> <p>Request Budget Adjustment Link Visibility: Specify true to make the link available. False hides the link.</p> <p>Additional Links Region: Select and specify the following:</p> <p>Set BM Options: Specify a label for BM options.</p> <p>View Document Link Visibility: Specify a label for the link.</p> <p>Get BM Help Text: Specify a label for the link.</p> <p>View Document Link Text: Specify a label for the link.</p> <p>Manage BM Rules Text: Specify a label for manage BM rules.</p> <p>View Document Link Location: Specify the URL address. For example, <i>http://<portal_host>:<portal port>/irj/portal/?NavigationTarget=ROLES://portal_content/com.sap.pct/line_manager/com.sap.pct.mss.manager/com.sap.pct.mss.iviews/com.sap.pct.mss.fin/com.sap.pct.mss.fin.lineitemmonitor_c</i></p> <p>Header Region: Select and specify the following:</p> <p>Alert Status Label Text: Specify a label for alert status.</p> <p>Internal Order Label Text: Specify a label for the internal order.</p>

	<p>Posting Label Text: Specify a label for posting.</p> <p>Posting Date Label Text: Specify a label for the posting date.</p> <p>Chart Region: Select and specify the following:</p> <p>Chart Warning Message: Specify a label for chart warning message.</p>
CV Alert Properties Dialog	<p>Rule Threshold Group Header: Specify the heading for the rule threshold group.</p> <p>Condition Label Text: Specify a label for the condition. For example, <i>View Line Monitor</i>.</p> <p>Button Cancel Caption: Specify a label for the cancel button.</p> <p>Triggered Report Properties Button Caption: Specify a label for the triggered report properties button.</p> <p>Rule Type Label Text: Specify a label for rule type.</p> <p>Rule Name Label Text: Specify a label for the rule.</p> <p>Triggered Reports Message: Specify a label for report message.</p> <p>Dialog Header: Specify a label for the dialog header.</p> <p>Triggered Reports Group Header Text: Specify a heading for triggered reports group.</p> <p>CheckBox Email Update Text: Specify a label for checkbox email update.</p> <p>Radio Button 2 Text: Specify a label for the radio button.</p> <p>Units Label Text: Specify a label for units.</p> <p>Rule Sensitivity Label Text: Specify a label for rule sensitivity.</p> <p>Button OK Caption: Specify a label for the OK button.</p> <p>Radio Button 1 Text: Specify a label for the radio button.</p> <p>Send Alert Label Text: Specify a label for send alert.</p> <p>Triggered Reports Label Text: Specify a label for triggered reports.</p> <p>CheckBox Email Summary Text: Specify a label for email summary.</p> <p>Alert Summaries Group Header: Specify a heading label for alert summaries group.</p> <p>Amount Label Text: Specify a label for amount.</p>
BM Rules Dialog	<p>Rule Label Text: Specify a label for the rule.</p> <p>Dialog Header: Specify a label for the dialog header.</p> <p>Button OK Caption: Specify a label for the OK button.</p> <p>Advanced Rule Management Button Link: Specify a label for advanced rule management button.</p> <p>Budget Alerts Delivery Text: Specify a label for budget alerts delivery.</p> <p>Button Advance Rule Caption: Specify a label for button advance rule.</p> <p>Button Alert Properties Caption: Specify a label for alert properties button.</p>

	<p>Apply Button Text: Specify a label for the apply button.</p> <p>Button Cancel Caption: Specify a label for the cancel button.</p>
CC Critical Posting	<p>Chart Region: Select and specify the following:</p> <p>Chart Not Available: Specify a label for chart message.</p> <p>Additional Links Region: Modify the following:</p> <p>View Document Link Location: Specify a URL address.</p> <p>Manage BM Rules Link Text: Specify a label for manage BM rules</p> <p>View Document Details Link Text: Specify a label for view document.</p> <p>Set BM Options Link Text: Specify a label for the BM Options.</p> <p>Get BM Help Link Text: Specify a label for activating the help information.</p> <p>View Document Link Visibility: Specify true to make the link available. False hides the link.</p> <p>Header Region: Select and specify the following:</p> <p>Posting Date Label Text: Specify a label for posting date.</p> <p>Posting Label Text: Specify a label for posting.</p> <p>Alert Status Label Text: Specify a label for alert status.</p> <p>Cost Center Label Text: Specify a label for cost center.</p> <p>Actions Region: Select and specify the following:</p> <p>Change Alert Properties Visibility: Specify true to make the link available. False hides the link.</p> <p>Change Alert Properties Link Text: Specify a label for change alert properties.</p> <p>Request Posting Adjustment Link Location: Specify a label for request posting adjustment.</p> <p>Request posting adjustment Link Text: Specify a label for request posting adjustment.</p> <p>Request Posting Adjustment Link Visibility: Specify true to make the link available. False hides the link.</p>
CP Posting Adjustment Request Dialog	<p>Button Select Caption: Specify a label for the select button.</p> <p>Rule Label Text: Specify a label for rule.</p> <p>Date Submitted Label Text: Specify a label for date submitted.</p> <p>Comments Label Text: Specify a label for comments.</p> <p>Button Deselect Caption: Specify a label for the deselect button.</p> <p>Posting Caption: Specify a label for posting.</p> <p>Alert Label Text: Specify a label for alert.</p>

	<p>Button Cancel Caption: Specify a label for the cancel button.</p> <p>Button Submit Caption: Specify a label for the submit button.</p> <p>Submitted By Label Text: Specify a label for submitted by.</p> <p>Select Alert Postings Label Text: Specify a label for select alert postings.</p>
CC Critical Variance	<p>Additional Links Region: Select and specify the following:</p> <p>Set BM Options Link Visibility: Specify a label for the BM options box.</p> <p>Set BM Options Link Text: Specify a label for the link.</p> <p>Get BM Help Link Visibility: Specify a label for the link to the help information.</p> <p>Manage BM Rule Link Text: Specify a label for the link.</p> <p>Get BM Help Link Text: Specify a label for the link to the help information.</p> <p>Manage BM Rules Link Visibility: Specify true to make the link available. False hides the link.</p> <p>Header Region: Select and specify the following:</p> <p>Alert Status Label Text: Specify a label for alert status.</p> <p>Variance Date Label Text: Specify a label for variance date.</p> <p>Cost Center Label Text: Specify a label for cost center.</p> <p>Chart Region: Select and specify the following:</p> <p>Chart Warning Message: Specify a label for chart warning message.</p> <p>Actions Region: Select and specify the following:</p> <p>Change Alert Properties Visibility: Specify true to make the link available. False hides the link.</p> <p>Change Alert Properties Link Text: Specify a label for change alert properties.</p>
BM Restore Options Dialog	<p>Budget Alerts Label Text: Specify a label for budget alerts.</p> <p>Dialog Header: Specify a label for dialog header.</p> <p>OK Button Caption: Specify a label for the OK button.</p> <p>CheckBox Return Moved Alerts Message: Specify a label for return moved alerts message.</p> <p>Budget Tasks Label Text: Specify a label for budget tasks.</p> <p>CheckBox Restore Views For Alerts Message: Specify a label for restore views for alerts message.</p> <p>CheckBox Return Moved Tasks Message: Specify a label for return moved tasks message.</p> <p>CheckBox Restore Views for Tasks Message: Specify a label for restore views for tasks message.</p>

BM Options Dialog	<p>Restore Views and Alerts Message: Specify a label for restore views and alerts message.</p> <p>Budget Monitoring Label Text: Specify a label for budget monitoring.</p> <p>Dialog Header: Specify a label for dialog header.</p> <p>Button Restore Caption: Specify a label for the restore button.</p>
Alert Conditions Warning Dialog 2	<p>Expiry Warning Text: Specify a label for expiry warning message.</p> <p>Button Cancel Caption: Specify a label for the cancel button.</p> <p>Warning Message 1: Specify a label for warning message.</p> <p>OK button caption: Specify a label for the OK button.</p> <p>Dialog Header: Specify a label for dialog header.</p>
Alert Conditions Warning Dialog 1	<p>Button Cancel Caption: Specify a label for the cancel button.</p> <p>OK Button Caption: Specify a label for the OK button.</p> <p>Dialog Header: Specify a label for alert Conditions warning dialog header.</p> <p>Warning Message 1: Specify a label for a warning message.</p> <p>Warning Message 2: Specify a label for warning message.</p>

6. Click *Save* to save the changes.

Note: Press *F5* to refresh the page.

Change Properties of Team Management at Runtime

For team management, you can edit text and change labels for various controls, and specify URL addresses to content on the Web or a portal.

To change properties and text items for team management:

1. Start the *Duet Administration Control Panel*, and click *Business Applications Property Editor*.
2. Enter the administrator user ID for logging on to the host of the SAP Duet Add-On. The same user ID must also be available in the SAP system as a system user.
3. Double click *Duet* on the left, to expand it. A cascaded tree with the names of the installed business application displays.
4. Select a Team Management. On the left side, a table of the customized parameters generated for the business application displays.

5. Enter the following:

Properties	Explanation
Employee Views Self	<ul style="list-style-type: none"> Actions: Specify the following: <ul style="list-style-type: none"> Unique Name: Specify a string that uniquely identifies the link. URL Location: Specify the URL address for the link. Link Text: Specify the text for the link. Employee Record Tab: Select and specify the following: <ul style="list-style-type: none"> Employee Sub Group: Specify a label for employee sub group. Organizational Assignment: Specify a label for Organizational Assignment. Manager: Specify a label for the property, manager. Personnel Area: Specify a label for personnel area. Organization Unit: Specify a label for organization unit. Job: Specify a label for job. Employee Group: Specify a label for employee group. Contract Data: Specify a label for contract data Manager Email: Specify a label for manager email. Organizational History: Specify a label for organizational history. Location: Specify a label for location. Absence Days: Specify a label for absence days. Personnel Sub Area: Specify a label for personnel sub area. Capacity Utilization Level: Specify a label for capacity utilization level. Position: Specify a label for position. Manager Phone: Specify a label for manager phone. Hire Date: Specify a label for hire date. You Can Also: <ul style="list-style-type: none"> Change Team Management Options: Specify a label for the options box. Get Team Management Help File Location: Specify the

	<p>path for the help file.</p> <ul style="list-style-type: none"> Links: Specify the following: <p>Unique Name: Specify a name unique to the link.</p> <p>URL Location: Specify the URL address for the link.</p> <p>Link Text: Specify the link text.</p> Get Team Management Help: Specify a label for the help information.
Employee Views Colleague	<ul style="list-style-type: none"> Employee Record Tab: Select and specify the following: <p>Employee Group: Specify a label for employee group.</p> <p>Personnel Area: Specify a label for personnel area.</p> <p>Capacity Utilization Level: Specify a label for capacity utilization level.</p> <p>Contract Data: Specify a label for contract data.</p> <p>Employee Sub Group: Specify a label for employee sub group.</p> <p>Hire Date: Specify a label for hire date.</p> <p>Organizational Assignment: Specify label for organizational assignment.</p> <p>Personnel Sub Area: Specify a label for personnel sub area.</p> You Can Also <p>Change Team Management Options: Specify label for change team management options.</p> <p>Get Team Management Help File Location: Specify the path to the help file.</p> <p>Get Team Management Help: Specify a label for help information.</p>
Manager Views Employee	<p>Employee Record Tab: Select and specify the following:</p> <p>Hire Date: Specify a label for hire date.</p> <p>Manager: Specify a label for manager.</p> <p>Personnel Sub Area: Specify a label for personnel sub area.</p> <p>Position: Specify a label for position.</p> <p>Organization Unit: Specify a label for organization unit.</p> <p>Capacity Utilization Level: Specify a label for capacity utilization level.</p>

	<p>Manager Phone: Specify a label for manager phone.</p> <p>Manager Email: Specify a label for manager email.</p> <p>Contract Data: Specify a label for contract data.</p> <p>Organizational Assignment: Specify a label for organizational assignment.</p> <p>Job: Specify a label for job.</p> <p>Organization History: Specify a label for organization history.</p> <p>Personnel Area: Specify a label for personnel area.</p> <p>Employee Group: Specify a label for employee group.</p> <p>Location: Specify a label for location.</p> <p>Employee Sub Group: Specify a label for employee sub group.</p> <p>Absent Days: Specify a label for absent days.</p>
Manager Views Team	<ul style="list-style-type: none"> Overview Tab: Select and specify the following: <p>Cost Center Manager: Specify a label for cost center manager.</p> <p>Controlling Area: Specify a label for controlling area.</p> <p>Vacancies: Specify a label for vacancies.</p> <p>Cost Center Header: Specify a label for cost center header.</p> <p>Cost Center: Specify a label for cost center.</p> <p>Organization Unit Number: Specify a label for organization unit number.</p> <p>Alias: Specify a label for alias.</p> <p>Manager: Specify a label for manager.</p> <p>Positions: Specify a label for positions.</p> <p>Qualifications: Specify a label for qualifications.</p> <p>Organizational Unit: Specify a label for organizational unit.</p> You Can Also: Select and specify the following: <p>Links: Specify the properties for links.</p> <p>Unique Names: Specify a unique name for each link.</p> <p>URL Links: Specify the URL address for each link.</p> <p>Link Texts: Specify the text for each link.</p> <p>Get Team Management Help: Specify text for the link to</p>

	<p>the help information.</p> <p>Get Team Management Help File Location: Specify the path to the help file.</p> <p>Change Team Management Options: Specify a label for the options box.</p>
Personalization	<p>Team Management: Specify a label for team management.</p> <p>Restore: Specify a label for restore.</p> <p>Restore Options: Specify a label for the restore options box.</p>
Employee View Compensation	<p>Heath Plan: Specify true to make the link available. False hides the link.</p> <p>Insurence Plan: Specify true to make the link available. False hides the link.</p> <p>Spending Plan: Specify true to make the link available. False hides the link.</p> <p>Savings Plan: Specify true to make the link available. False hides the link.</p> <p>Stock Purchase Plan: Specify true to make the link available. False hides the link.</p> <p>Misc Plan: Specify true to make the link available. False hides the link.</p> <p>Credit Plan: Specify true to make the link available. False hides the link.</p>
Employee Views Self Compensation	<ul style="list-style-type: none"> • You Can Also: Select and specify the following: <ul style="list-style-type: none"> • Links: Specify the following: <p>Unique Name: Specify a unique name for each link.</p> <p>URL Location: Specify the URL address for each link.</p> <p>Link Text: Specify the text for each link.</p> • Get Team Management Help File Location: Specify the path to the help file. • Get Team Management Help: Specify a label for the help information. • Change Team Management Options: Specify a label for options box. • Actions: Select and specify the following: <ul style="list-style-type: none"> • Links: Specify the following: <p>Unique Name: Specify a unique name for each link.</p>

	<p>URL Location: Specify the URL address for each link.</p> <p>Link Text: Specify the text for each link.</p>
Manager View Compensation	<p>Compensation Adj: Specify true to make the link available. False hides the link.</p> <p>Long Term Incentive: Specify true to make the link available. False hides the link.</p>
Restore Options	<p>My Team: Specify a label for my team.</p> <p>My Colleagues: Specify a label for my colleagues.</p> <p>Button Cancel: Specify a label for the cancel button Cancel.</p> <p>Button OK: Specify a label for the OK button.</p>
Manager Views Employees	<ul style="list-style-type: none"> You Can Also: Select and specify the following: <ul style="list-style-type: none"> Links: Specify the properties for links. Unique Names: Specify a unique name for each link. URL Links: Specify the URL address each link. Link Texts: Specify the text for each link. Get Team Management Help: Specify text for the link to the help information. Get Team Management Help File Location: Specify the path to the help file. Change Team Management Options: Specify a label for the options box. Actions: Select and specify the following: <ul style="list-style-type: none"> Links: Change the following: <ul style="list-style-type: none"> Unique Name: Specify a unique name for each link. URL Location: Specify the URL address for each link. Link Text: Specify the text for each link.

Manager Views Employee Files	<ul style="list-style-type: none"> • Delete Button: Specify a label for the delete button. • You Can Also: Select and specify the following: <p>Links: Specify the properties for links.</p> <p>Unique Names: Specify a unique name for each link.</p> <p>URL Links: Specify the URL address for each link.</p> <p>Link Texts: Specify the text for each link.</p> <p>Get Team Management Help: Specify text for the link to the help information.</p> <p>Get Team Management Help File Location: Specify the path to the help file.</p> <p>Change Team Management Options: Specify a label for the options box.</p>
Manager Views Employee Record	<ul style="list-style-type: none"> • Actions: Select and specify the following: <p>Links: Specify the properties for links.</p> <p>Unique Names: Specify a unique name for each link.</p> <p>URL Links: Specify the URL address for each link.</p> <p>Link Texts: Specify the text for each link.</p>
Employee Views Team	<ul style="list-style-type: none"> • You can Also: Select and specify the following: <p>Get Team Management Help: Specify the text for the link to the help information.</p> <p>Get Team Management Help File Location: Specify the path to the help file.</p> <p>Change Team Management Options: Specify a label for the options box.</p>
Employee View Files	<p>Delete Button: Specify a label for the delete button.</p> <p>Add Button: Specify a label for the add button.</p>
Manager View Employee Files	<p>Add Button: Specify a label for the add button.</p>

6. Click *Save* to save the changes.

Note: Press *F5* to refresh the page.

Configuring Additional Duet Add-On Hosts

This section describes how to configure additional Duet Add-On hosts in a productive Duet system landscape.

See the section “*Deploying Additional Duet Add-On Hosts in the Duet System Landscape*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at:

service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

After installation and post-installation configuration of the Duet Add-On host, load the metadata for Duet business applications in the additional Duet Add-On host.

Connect Additional Duet Add-On Host to the Duet System Landscape

You can connect an additional Duet Add-On host to an SAP system which has been configured to work with Duet using the Duet Administration Control Panel.

The following is workflow:

1. Prepare host and install the Duet Add-On components in it.

See the section “*Chapter 4: Deploying the Duet Add-On*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

2. Define the settings for the new Duet Add-On host.
3. Map roles from the SAP system to the default roles for the business applications.
4. Configure trust between the Duet Add-On host and the SAP system

See the section “*Configuring Trust in the Duet Add-On Environment*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

5. Load the Duet business applications into the new host.

See the section “*Loading Duet Business Applications*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

Define Connection Settings to an SAP System

You define the settings for the new Duet Add-On from the Duet server host.

To define the connection settings to an SAP system:

1. Start the *Duet Administration Control Panel* using the following URL:
http://<Duet Server Host Name>:<J2EE HTTP PORT>

*/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. Choose *Define Add-On*, and enter the following:

Property	Description
Host	Specify the host name of the SAP Web AS Java system on top of which the Duet Add-On runs. For example, <i>il9duet.sap.com</i>
Port	Specify the http port number of the SAP Web AS Java system on which the Duet server runs. For example, <i>50000</i> .
SSL Port	Specify the SSL (https) port number of the SAP Web AS Java system on which the Duet server runs. For example, <i>50004</i> .
Host	Specify the host name of the SAP Web AS ABAP system. The host name is the same if you do not have SAP Web AS ABAP system installed. For example, <i>il9duet.sap.com</i>
Port	Specify the http port number of the SAP Web AS ABAP system. The port number is the same if you do not have SAP Web AS ABAP system installed. For example, <i>50004</i> .

4. From the list of SAP system IDs, select the SAP system you want the Duet Add-On to connect to, and choose *Apply*.

Map Roles from mySAP ERP System to Roles in Business Applications

After you connect to the SAP system, you must define the roles in that system, and map them to the default Duet business applications roles.

To define and map roles between business applications and mySAP ERP:

1. Start the *Duet Administration Control Panel* using the following URL:
*http://<Duet Server Host Name>:<J2EE HTTP PORT>
/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. From the *Duet Administration Control Panel*, select *Map Role*.

4. In the *Map Roles* screen, enter the following:

Property	Description
System Name	Specify the system ID of the mySAP ERP system to connect to.
Role Name	Specify the name of the role in the SAP system.
Synchronized	Select <i>Synchronized</i> . Note: Always select Synchronized to enable synchronization between the roles from the SAP system and the business application roles.

5. Choose *Add Role*, the Map Role screen displays the system ID and client number of the specified mySAP ERP system displays. The table on the left displays a list of the specified roles in the SAP system.

Note: You can add several roles that exist in the SAP system one after the other.

6. Select an SAP system role from the table on the left, and from the table on the right, select the default business application roles to map to the selected SAP system role.

Note: You can select several business applications roles, and enable role synchronization for them.

7. Choose *Apply*.

Note: After, you must configure trust between the new Duet Add-On host and the SAP system, and then you load the Duet business applications.

Find detailed information about trust, and installing the Duet business applications, in the *Duet for Microsoft Office and SAP, SAP Installation Guide*, available at:
service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

Connect Additional SAP System to the Duet System Landscape

You can connect additional SAP systems to the Duet system landscape using the Define SAP System wizard in the Duet Administration Control Panel.

The following is workflow:

1. Configure the SAP system to work with Duet. See “*Chapter 5: Configuring mySAP ERP for Duet Business Applications*.”
2. Define the connection settings to the SAP system.
3. Manually map roles from the SAP system to the default roles for the business applications using the Duet System Management tool.

See the section “*Define and Map Roles between SAP Systems and Duet Business Applications*” on page 22.

4. Configure trust between the Duet Add-On host and the SAP system.

See the section “*Configuring Trust in the Duet Add-On Environment*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at:

service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

First, make sure that the SAP system you want to bring in to the Duet landscape has been prepared and configured to work with Duet. See “*Chapter 5: Configuring mySAP ERP for Duet Business Applications*” for more information.

To define and map roles between business applications and mySAP ERP:

1. Start the *Duet Administration Control Panel* using the following URL:
<http://<Duet Server Host Name>:<J2EE HTTP PORT>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp>

Where *<Duet Server Host Name>:<J2EE HTTP PORT>* refers to the host name of the Duet Server and the port number of the J2EE engine.

2. Enter the administrator credentials for the SAP J2EE on which the Duet server runs.
3. From the *Duet Administration Control Panel*, select *Define SAP System*.
4. In the *Connection Details* screen, enter the connection settings to a specific SAP system (this is the SAP system you intend to enable for Duet):

Property	Description
System Name	Specify the system ID of the mySAP ERP system to connect to. For example, <i>UC9</i> .
Client	Specify the client number to connect to.
Host	Specify the host name of the SAP system. For example, <i>U9Cmain</i> .
Port	Specify the port number of the SAP system you want to connect to.
Number	Specify the system number in the SAP system to connect to. For example, <i>77</i> .
Loading balancing	You can choose <i>Yes</i> or <i>No</i> . Choose <i>Yes</i> , and enter the settings for the Message server. Choose <i>No</i> , if there is no Message server in the SAP system landscape.
Message Server Host	Specify the host name of the SAP system. For example, <i>U9Cmain.duet.sap.com</i> .
Message Server Port	Specify the port number of the Message server you want to connect to.
Logon Group	Specify the group and server to logon to.

5. Choose *Next*, the *Map Role* screen displays the system ID and client number of the specified mySAP ERP system displays. For example, *QEF.801*. The table on the left displays a list of the specified roles in the SAP system.

6. Select an SAP system role from the table on the left, and from the table on the right, select the default business application roles to map to the selected SAP system role.

Note: You can select several business applications roles, and enable role synchronization for them.

7. Choose *Next*, the *Business Applications* screen displays.

8. Select the Duet business applications with their roles mapped to the roles in mySAP ERP system.

Note: Make sure that you install the appropriate support package required by the selected business applications in mySAP ERP system.

9. Choose *Finish*.

Note: If you are connecting the SAP system to an existing Duet Add-On host, manually configure the SAP system using the Duet System Management tool.

See the section “Mapping between ERP Systems to Add-On” under the topic “*Change Connection Settings to SAP Systems and Role*” on page 15.

10. Configure trust between the SAP system and the Duet Add-On host.

See the section “*Configuring Trust in the Duet Add-On Environment*” in the *Duet for Microsoft Office and SAP, SAP Installation Guide* available at:
service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

Monitoring Duet Environments

You can monitor the status of a critical Duet component, Item Handler service, by configuring the use of Computing Center Management System (CCMS) in the Duet system landscape.

CCMS monitors are available in the SAP Web Application Server to help you identify problems that may occur in your landscape during runtime.

To monitor the availability of Item Handler service, you must configure the Generic Request and Message Generator (GRMG) monitor, in the CCMS. This monitor uses the SSL protocol for communications, for this reason, use it to monitor your productive system landscape.

For detailed information about CCMS monitoring, go to the SAP Help Portal at: help.sap.com → *SAP Library* → *SAP NetWeaver 2004* → *SAP Library* → *SAP NetWeaver* → *SAP NetWeaver Technical Operations Manual* → *Administration of the SAP Web Application Server (ABAP)* → *Monitoring* → *The Alert Monitor*.

- Under *See Also* in *The Alert Monitor* page, select *Concept of the Monitoring Architecture* → *The Alert Monitor* → *Monitoring with the Generic Request and Message Generator*.

In addition, you can use the log files in the Log Viewer of the Visual Administrator in SAP Web Application Server Java system, to check the status of other Duet components.

Enabling the GRMG Monitoring

To enable GRMG monitoring:

1. Start the Visual Administrator using: `<SAPJ2EEEngine_installation>\j2ee\admin\go.bat`
2. Choose *server* → *Monitoring* → *Runtime* → *GRMG Customizing* → *sap.com/xapps~osp~addon~deployer*
3. Choose *Upload*. No indication or processing information displays.
4. From the SAP system, open CCMS monitors to display the status of the *Item Handler* service.

Chapter 4: Security

Preventing unsuccessfully authenticated and unauthorized individuals from accessing and reading data, is the primary role of security mechanisms.

For Duet, these mechanisms are designed such that, both Duet users and Duet components perform only the actions that they are allowed to perform. This results in the protection of sensitive data and confidential business information, and prevents data from being compromised.

This section provides security-relevant information that applies to user administration and authentication in Duet.

Configuring User Management in the Duet Landscape

Duet uses user management and authentication mechanisms provided by both SAP® and Microsoft®.

You configure user management and authentication using the SAP Web Application Server, to enable single sign-on to all systems running in the Duet landscape.

You manage users and user mapping data using the User Management Engine (UME), which you configure for the Duet landscape. You configure the user management engine to connect to your user store in the two systems: Windows and SAP system.

Note: If users use the same user ID in all systems, that is, the user uses the same user ID to log onto Windows, and to mySAP ERP systems, do not configure user mapping in UME.

Passwords do not have to be the same in all systems.

Where the user ID in Windows of a specific user differs from the user ID in the SAP system, then you must map the user data.

The following is the sequence for configuring user management in Duet:

1. Configure the user management engine in the host of the Duet server to connect to Microsoft Active Directory® directory service.

For more information, see the section “*Setting Up the SAP User Management Engine to Connect to the Active Directory*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place: service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

2. Configure the user mapping data in the host of the Duet server, as explained in the sections that follow.

3. Configure the user management engine in the host of the Duet Add-On to connect to either the SAP Web AS ABAP user management, or to the Active Directory service.

For more information, see the section “*Setting Up User Management Engine to Connect to mySAP ERP User Store*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place: service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

Configuring User Mapping Data in the User Management Engine

The SAP User Management Engine (UME) is seamlessly integrated in SAP Web Application Server Java system, which provides the administration tools for managing user data.

You enable mapping of users with Windows accounts to users in mySAP ERP system, using the user management engine.

Note: Where the user ID in the Windows account of a user differs from the user ID in the user store used by mySAP ERP, you must map user data in the UME to enable users to access all systems. However, do not perform user mapping where the user ID for users are the same in Windows and in mySAP ERP system.

Passwords do not have to be the same.

You must decide where to locate the user mapping, either in:

- A directory service such as, Active Directory Service.
- The same database used by the SAP Web AS Java system on which the Duet server runs.

The advantage of using an Active Directory service is that you can re-use the data for other systems instead of maintaining it in every system's database.

Configuring the User Mapping Data to use Active Directory

Requirement

- You have an Active Directory as a data source. In the Active Directory, one of the user attributes defined, contain users' ABAP user ID.

There are two alternative tools for configuring the user mapping data in an LDAP directory:

- Using ADS tools
- Using UME tools

The following is the sequence for configuring the user mapping data in a directory service:

1. Edit UME properties and configuration files for the directory service
2. Set the user ID using the one of either Active Directory service tools or UME tools

Editing UME Properties and Configuration Files for an ADS

Change UME properties and data source configuration files in the UME.

To change UME properties:

1. Start the Config Tool using the file:
`<SAPJ2EEEngine_installation>\j2ee\configtool\configtool.bat`
2. Under *Cluster data* → *Global server configurations* → *services* → *com.sap.security.core.ume.service*
3. Select the following UME properties in the list, and enter the values:

Property	Description
ume.r3.mastersystem	Type <i>UME Internal Reference System</i> . Specifies the data source of the referenced SAP system used for SAP user IDs in SAP logon ticket. Required for Single Sign-On with logon tickets to SAP Systems. For example; <i>ume.r3.mastersystem=UME Internal Reference System</i>
ume.usermapping.refsys.mapping.type	Type <i>attribute</i> . Defines that the UME gets the users' ABAP user ID from the LDAP directory in the logical user attribute, <i>REFERENCE_SYSTEM_USER</i> . For example; <i>ume.usermapping.refsys.mapping.type=attribute</i>
ume.admin.addattrs	Type <i>\$usermapping\$:REFERENCE_SYSTEM_USER</i> . Specifies the additional fields to the user profile in the user interfaces. These attributes are only visible for administrator users. Where <i>\$usermapping\$</i> is the namespace, and <i>REFERENCE_SYSTEM_USER</i> is the logical user attribute.
ume.admin.self.addattrs	Type <i>none</i> . Specifies the additional fields to the user profile in the user interfaces. The attributes you define are not visible to non-administrators. For example; <i>ume.admin.self.addattrs=none</i>

4. In *Value* at the bottom of the screen, enter the new value that you want to assign to the property.
5. Choose *Set*.
6. Choose *Apply* changes.

Editing UME Configuration Files for an ADS

Define the attribute mapping from the logical attribute *REFERENCE_SYSTEM_USER* to the physical attribute that actually stores the ABAP user ID in your ADS directory.

The ABAP user ID used in the SAP logon ticket from an ADS has a default value for the property *attribute*. For example, the default value for attribute can be *sapusername*.

To use another LDAP attribute, adjust the attribute mapping in the LDAP data source configuration XML file (logical UME attribute *\$usermapping\$:REFERENCE_SYSTEM_USER*).

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *SAP Library* → *SAP NetWeaver* → *Security* → *User Authentication and Single Sign-On* → *Authentication on the Portal* → *Single Sign-On* → *Single Sign-On to SAP Systems* → *Using an LDAP Directory Attribute as the ABAP User ID*.

To modify the attribute, edit the data source file for the *CORP_LDAP* data source. Do not edit the configuration file, if you do not want to use another LDAP attribute.

To edit the configuration file for your directory service:

1. Start the Config Tool using the file:
`<SAPJ2EEEngine_installation>\j2ee\configtool\configtool.bat`
2. Select the icon for *Switch to configuration editor mode*.
3. Go to *Configurations* → *cluster_data* → *server* → *persistent* → *com.sap.security.core.ume.service*.
4. To switch to edit mode, select the icon *Switch between view and edit mode*.
5. In the tree, select the suitable configuration file for your directory service, and choose *Show the details of the selected node*.
6. Choose *Download* and save the file with a different name to a local directory.
7. Open it in an editor and change the value for *physicalAttribute* to the new LDAP attribute.

From under the *attributeMapping* section:

```
<namespace name="$usermapping$">
  <attributes>
    <attribute name="REFERENCE_SYSTEM_USER">
      <physicalAttribute name="sapusername"/>
    </attribute>
  </attributes>
</namespace>
```

8. Create a new node in the configuration tree for the edited file as follows:
 - a. Select the node *com.sap.security.core.ume.service*.
 - b. Click the icon *Create a node* below the selected node.
 - c. Select the type *File-entry*.
 - d. Choose *Upload* and select the file from your local directory.

- e. Enter the name for the entry. For example, *dataSourceConfiguration_ads_readonly_db_productive.xml*. By default, the name of the uploaded file is used.
- f. Choose *Create*.
- g. Choose *Close* window.

The new node appears in the configuration tree.

Note: For UME to use the new configuration file, you have to change the value of the property *ume.persistence.data_source_configuration* to the name of the new configuration file. See “*Editing UME Properties and Configuration Files for an ADS*” on page 55, for information on how to edit UME properties.

9. Restart the nodes in the cluster for the changes to take effect.

Setting User Mapping Data for the Active Directory Service

You can use one of the following tools to set the user mapping data in the directory service.

- Using ADS tools

Set the ABAP user ID as (single) value for the named attribute in the directory service.

Note: You must wait (about 10 minutes) for the change to be effected in the UME, due to UME LDAP caching processes.

In this case, the UME can use a Read-only Active Directory Service.

- Using UME tools

Set the ABAP user ID in the attribute *REFERENCE_SYSTEM_USER*, using the user administration console: *http://<Duet server host>:<HTTP_port>/useradmin/*

In this case, the UME must use Writeable ADS.

Note: Only administrators can perform the configurations.

Configuring the User Mapping Data in the Same Database as SAP Web AS Java System

The following is the sequence for configuring the user mapping data in the same database as the SAP Web AS Java system:

1. Edit UME properties and configuration files for the database.
2. Set the user ID using the UME tools.

Editing UME Properties for the Database Used the Web AS Java System

Change UME properties and data source configuration files in the UME.

To change UME properties:

1. Start the Config Tool using the file:
`<SAPJ2EEEngine_installation>\j2ee\configtool\configtool.bat`
2. Under *Cluster data* → *Global server configurations* → *services* → *com.sap.security.core.ume.service*
3. Select the following UME properties in the list, and enter the values:

Property	Values
ume.r3.mastersystem	UME Internal Reference System
ume.usermapping.refsys.mapping.type	attribute
ume.admin.addattrs	\$usermapping\$:REFERENCE_SYSTEM_USER
ume.admin.self.addattrs	none

4. In *Value* at the bottom of the screen, enter the new value that you want to assign to the property.
5. Choose *Set*.
6. Choose *Apply* changes.

Editing UME Configuration Files for the SAP Web AS Java System Database

When the configuration of data source "CORP_LDAP", does not contain the special attribute for user mapping, then the J2EE database is the data source that handles all read and write requests for the attribute.

Edit the configuration file by removing the values for the attribute mapping, and the attribute definition, in the section, "*responsibleFor*" of the "CORP_LDAP" datasource.

7. Start the Config Tool using the file:
`<SAPJ2EEEngine_installation>\j2ee\configtool\configtool.bat`
8. Select the icon for *Switch to configuration editor mode*.
9. Select *Configuration* → *cluster_data* → *server* → *persistent* → *com.sap.security.core.ume.service*.
10. To switch to edit mode, select the icon for *Switch between view and edit mode*.
11. In the tree, select the suitable configuration file for your directory service, and choose *Show the details of the selected node*.
12. Choose *Download* and save the file with a different to a local directory.

13. Open it in an editor and delete the following:

- In the section, *responsibleFor*:

```
<nameSpace name="$usermapping$">
  <attributes>
    <attribute name="REFERENCE_SYSTEM_USER"/>
  </attributes>
</nameSpace>
```

- In the section, *attributeMapping*:

```
<nameSpace name="$usermapping$">
  <attributes>
    <attribute name="REFERENCE_SYSTEM_USER">
      <physicalAttribute name="sapusername"/>
    </attribute>
  </attributes>
</nameSpace>
```

14. Save the changes, and create a new node in the configuration tree for the edited file as follows:

- a. Select the node *com.sap.security.core.ume.service*.
- b. Click the icon Create a node below the selected node.
- c. Select the type *File-entry*.
- d. Choose *Upload* and select the file from your local directory.
- e. Enter the name for the entry, for example, *dataSourceConfiguration_ads_readonly_db_productive.xml*. By default, the name of the uploaded file is used.
- f. Choose *Create*.
- g. Choose *Close* window. The new node appears in the configuration tree.

Note: For UME to use the new configuration file, you have to change the value of the property *ume.persistence.data_source_configuration* to the name of the new configuration file. See “*Editing UME Properties for the Database Used by the SAP Web AS Java System*” above for information on how to edit UME properties.

15. Restart the nodes in the cluster for the changes to take effect.

Setting User Mapping Data for the Database

You can use the following tool to set the user mapping data in the database.

- Using UME tools

Set the ABAP user ID in the attribute *REFERENCE_SYSTEM_USER*, using the user administration console: *http://<Duet server host>:<HTTP_port>/useradmin/*. In this case, the UME must use read-only Active Directory service.

Authentication in the Duet Landscape

To implement authentication in the Duet landscape, you can configure the SAP Web AS to use one of the following:

- Kerberos protocol, which is part of the Microsoft Windows operating system.

You configure the SAP Web AS to use Kerberos authentication and to issue SAP logon tickets for use within the Duet and SAP system environments.

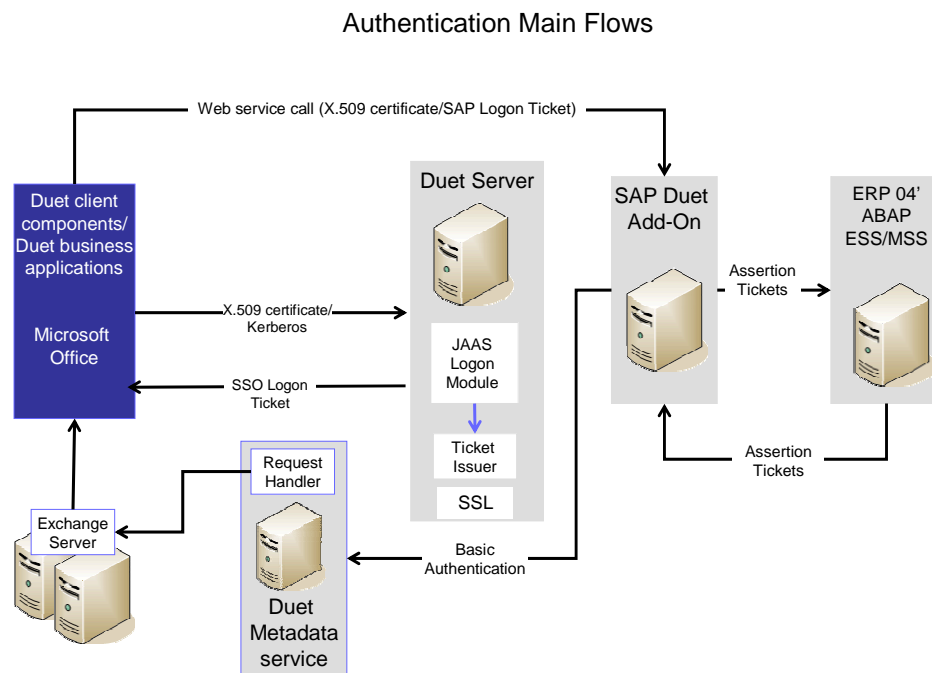
For more information, see the section “*Configuring Duet Server as the Ticket Issuing System*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place: service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

- X.509 certificates with encrypted connections using secure sockets layer (SSL)

You configure the SAP Web AS to use X.509 digital certificates from clients. A certificate authority must have signed these certificates.

In addition, you must configure the SAP Web AS to support SSL connections through the HTTPS protocol.

The following illustrates the authentication mechanisms in the Duet landscape:



You must configure the Duet environment to securely authenticate and allow users, access to the content for which they have permissions.

When a user is authenticated with Integrated Windows authentication (Kerberos), and the user has the proper permissions, an SAP ticket issuing mechanism issues the user with a logon ticket, which contains the user's ID and assigned role. Users that are authenticated using X.509 client certificates go to both Duet Server and SAP Duet Add-On.

The logon ticket enables the users to be authenticated once when they log on, and from then on automatically access all systems without being prompted for the logon credentials. It contains metadata about the current user together with information about the issuing system.

You must configure the use of certificates and logon tickets for single sign-on. The following is the workflow for ensuring proper authentication in Duet:

1. Configure the ticket issuing system in the host of the Duet server.
2. Configure trust for SAP logon tickets in the host of Duet server, the host of the SAP Duet Add-On, and in mySAP ERP environment.

Note: You do not configure trust between the Duet server and the SAP Duet Add-On, if you have configured authentication using X.509 client certificates.

Configuring the Ticket Issuing System

Where you use Kerberos authentication, you must enable Windows users to access Duet data and SAP systems using their Windows account through logon tickets. You configure the Duet server to issue a logon ticket to each user. This logon ticket allows the user to access other systems using single sign-on.

You can configure the SAP Web AS Java system to work with either, Simple and Protected GSSAPI Negotiation (SPNego) protocol (Kerberos authentication on the host of the Duet server), or X.509 client certificates on both the Duet server and SAP Duet Add-On.

For more information about using Kerberos authentication, see the section “*Configuring Duet Server as the Ticket Issuing System*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place: service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

Note: The installation describes how to implement Kerberos in the Duet landscape, as this is the Integrated Windows Authentication for use in the Duet landscape.

The following section describes how to configure X.509 and SSL for the ticket issuing host.

Configuring the Use of Secure Sockets Layer

Secure sockets layer (SSL) protects transmissions using encryption. It works through a certificate that authenticates a domain. In the Duet landscape, you configure the use of SSL with X.509 client certificates. With this certificate, secure transmissions are certified and validated.

Note: We recommend that you implement SSL for use in your productive landscape.

Configuring the Use of SSL and Secure Network Communication

Configure SSL to work with all the instances of SAP Web AS Java system in the Duet landscape: both the Duet server and the Duet Add-On hosts.

Configuring SSL in the Duet Server Host

You can configure the use of SSL in the Duet server host before you install the Duet server. Configuring SSL in the Duet server consists of the following:

1. Configuring SSL in the SAP Web AS Java system on which you intend to run the Duet server.

For more information about configuring SSL for the SAP Web AS Java system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *Network and Transport Layer Security* → *Transport Layer Security on the SAP J2EE Engine* → *Configuring the Use of SSL on the SAP J2EE Engine*

2. Selecting the SSL option during deployment of the Duet server.

For more information, see the section “*Deploying the Duet Server Environment*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

3. Configure the use of SSL between the User Management Engine and the Active Directory Service.

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *Network and Transport Layer Security* → *Network and Transport Layer Security* → *Transport Layer Security on the SAP J2EE Engine* → *Configuring SSL Between the UME and an LDAP Directory*

However, if you decide to configure SSL in the Duet server after installation, then configure the Duet server host as follows:

Configure SSL in the SAP Web AS Java system on which you installed the Duet server.

1. Start the *Duet Administration Control Panel*, using the following URL in your browser:
http:<J2EE_Duet_Server_Host>:<J2EE_Port>/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro/AdminLaunchpadApp
2. Click *Duet System Management* and select *Security*.
3. In *HTTP Client-Server Protocol*, change protocol to *https*.
4. Click *Save Category Security*.
5. Select *Service Provider* on the left, and change the values of the following properties:

Property	Description
Service Mapper URL	<p>Change the URL of the Service Mapper to: <i>https://<fully qualified domain name>:<https port number></i></p> <p>For example: <i>https://duet4.msft.sap:55000/ServiceMapperImplWS/Config1?style</i></p>

	= <i>document</i>
Ticket Issuer URL	Change the URL of the ticket issuer to: <i>https://<fully qualified domain name>:<https port number>/osp/TicketIssuer</i>
Service Provider URL	Change the URL of the Service Provider to: <i>https://<fully qualified domain name>:<https port number></i> For example: <i>https://duetAddOn.msft.sap:55000/MetadataPublisher/Config1?style</i> = <i>document</i>

6. Click *Save Service Provider Category*.
7. From the *Duet Administration Control Panel*, click *Add or Remove Business Applications*, and enter the administrator credentials of the SAP Web AS Java system on which the Duet server runs.
8. In the *Add or Remove Business Applications* editor, select one of the business applications from the list, and click *Remove* to delete the selected business application.
9. Click *Browse* and select the zipped file of the deleted business application.
10. Click *Add*, to restore it.
11. Publish the metadata from the Duet metadata service host. See the section “*Publishing the Metadata for Duet Business Applications*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on Service Market Place at: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

You can disable all communications through the HTTP port. To do so:

1. Start the Visual Admin using: *<SAPJ2EEEngine_installation>\j2ee\admin\go.bat*
2. From the tree, select *Dispatcher* → *Services* → *HTTP Provider*
3. Select the *Properties* tab, and select *Ports* property
4. Remove the *HTTP-port* declaration.
5. Click *Update* and *Save Properties*.

For more information about configuring SSL for the SAP Web AS Java system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Application Platform* → *Java Technology in SAP Web Application Server* → *Administration Manual* → *Server Administration* → *J2EE Engine Administration* → *Web Container* → *HTTP Provider Service* → *Setting up HTTP Provider Service to Accept Incoming Requests*

Configuring SSL in the Duet Add-On Host

You can configure the use of SSL in the Duet Add-On host before you install the Add-On components. Configuring SSL in the Duet Add-On consists of the following:

1. Configuring the Internet information service (IIS) in the Duet metadata service host to use SSL connections.
2. Configuring the communication destination for the Formatter Web service to use SSL connections.
3. Configuring SSL in the SAP Web AS Java system on which the Duet Add-On runs.

For more information about configuring SSL for the SAP Web AS Java system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *Network and Transport Layer Security* → *Transport Layer Security on the SAP J2EE Engine* → *Configuring the Use of SSL on the SAP J2EE Engine*

4. Configuring Secure Network Communications to mySAP ERP

Configuring IIS to Use SSL Connections

You must enable IIS to use SSL security features to encrypt transmissions.

1. From the *Start menu* → *Settings* → *Control Panel* → *Administrative tools* → *Internet Information Services*. The Internet Information Services window opens.
2. Expand the local computer, and then double-click *Web Sites*.
3. Expand *Default Web Site*, and select *RequestHandler*. This is the file to protect with SSL.
4. Right click *RequestHandler*, and then select *Properties*.
5. In *Web Site Identification*, click *Advanced*.
6. In *Advanced Web site Identification*, under *Multiple identities for this Web site*, verify the following:
 - The Web site IP address is assigned to port 443, the default port for secure communications, and then click *OK*.
7. Select the *Directory Security* or *File Security* tab, and click *Edit* under *Secure communications*.
8. In the *Secure communications* windows, select *Require secure channel (SSL)*, and then click *OK* twice.
9. Right click *Default Web Sites* and select *Properties*.
10. Select the *Directory Security* tab, and then select *Server Certificate* in the *Secure communications* panel.
11. Click *Next* to create a certificate or import a certificate from a *.pfx file.
12. Complete the wizard by importing or creating a certificate.

Configuring Communication Destination for the Formatter Web Service to Use SSL Connections

You must configure the communication destinations in the Duet Add-On host.

To configure the Formatter Web Service destination:

1. Load the file, *go.bat* from the path: `<SAPJ2EEEngine_installation>\j2ee\admin\>`
2. In the *Connect to SAP J2EE Engine* window select *Default* and choose *Connect*.
3. In the login window, specify the administrator user and its corresponding password and choose *Connect*.
4. Choose *Cluster tab* → *Server* → *Services* → *Destination* → *Runtime* tab.
5. Click *Web Service*. A list of all the Web Services destinations in the SAP Web AS Java system displays.

Find and configure the following Web service proxy:

```
sap.com/xapps~osp~formatter~wsproxy  
/com.sap.osp.formatter.wsproxy.formatter/FacadeSoap
```

6. Change the values for the proxy as follows:
 - a. From *Configure Web Services Destination*, change the value for URL from *Default* to *Custom*.
 - b. Click OK in the window, and change the protocol to https and the port number to the https port on the IIS for the Request Handler Web service.
For example: `https://<Duet_metadata_service_host>:<https_port>/RequestHandler/RequestHandler.asmx`
 - c. Select the corresponding option under *Server Certificates*.
 - d. Select the *Keystore* view that contains the root certificates from the Certificate Authority (CA). You can choose to accept or to ignore server certificates.

If you choose to accept, and the *Keystore* service does not contain the Certificate Authority then import it (using *Load*).

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *System Security* → *System Security for SAP Web AS Java Only* → *Key Storage Service* → *Managing Entries*.
 - e. Click *Save* and *Test*.

Stopping and Starting the Web Service Proxy

1. From the *Admin Console* window, select *Services* → *Deploy service*.
2. In the right pane, select *Application* → *Web Container*.
3. Select *sap.com/xapps~osp~formatter~wsproxy*, the deployed component file.
4. Click *Stop Application* to stop the proxy.
5. Select *Start Application* to start the proxy

Configuring Secure Network Communications Connections to mySAP ERP

You use secure network communications (SNC) connections between the host of the Duet Add-On and mySAP ERP system.

Requirement

- Make sure that you have configured RFC Destinations for the Duet Add-On host.

For more information about configuring SNC connections to mySAP ERP system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *Network and Transport Layer Security* → *Transport Layer Security on the SAP J2EE Engine* → *Configuring SNC (SAP J2EE Engine (ABAP Engine))*

Using X.509 Client Certificates

Configure X.509 client certificates to work with the SAP Web AS Java system on which the Duet server runs, and then on the SAP Web AS Java system on which the Duet Add-On runs. In addition to using SSL for encrypting connections, you must use SSL when authenticating with X.509 client certificates in the SAP Web AS Java system.

Requirements

- Make sure that you have configured the SAP Web AS Java system to use SSL encrypted connections.

For more information about configuring SSL for the SAP Web AS Java system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *Network and Transport Layer Security* → *Transport Layer Security on the SAP J2EE Engine* → *Configuring the Use of SSL on the SAP J2EE Engine*

- Make sure that end users possess valid X.509 client certificates that have been signed by a trusted Certification Authority (CA).

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *User Authentication and Single Sign-On* → *Authentication on the J2EE Engine* → *Configuring Authentication Mechanisms* → *Using Client Certificates for User Authentication* → *Configuring the Use of Client Certificates for Authentication*

- Make sure that the SSL CA: the client certificate and the issuer certificate have been imported into the clients' Web browsers.

Configuring SSL and X.509 client certificates in the SAP Web AS Java system consists of the following:

1. Verifying that the CA root certificate exists as an entry in SAP Web AS Java system.
2. Managing credentials and certificates to use SSL in the SAP Web AS Java System
3. Configuring the use of client certificates for authentication in Duet
4. Defining sequence for performing client certificate authentication
5. Configuring the hosts of the Duet server and the Duet Add-On to use X.509 authentication.

To verify that the CA root certificate exists as an entry in SAP Web AS Java system:

- Using the Key Storage service, make sure the CA's root certificate exists as a CERTIFICATE entry in the TrustedCAs view. If it is not already there, then import it into this view.

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *System Security* → *System Security for SAP Web AS Java Only* → *Key Storage Service* → *Managing Entries*

Managing Credentials and Certificates to Use SSL in the SAP Web AS Java System

You must add and manage the credentials and certificates to use SSL.

1. Start the Visual Admin Console using the file, *go.bat*, located in the path:
`<SAPJ2EEEngine_installation>\j2ee\admin\>`
2. From *Visual Admin* window, choose *Server* → *Services* → *SSL Provider*.
3. Choose the Dispatcher.
4. From the *Runtime* tab, choose the *Client Authentication* tab.
5. Choose *Request client certificate*.
6. Choose *Add* and select the root certificate of the CA in the Trusted Certification Authorities list.

For more information about configuring SSL for the SAP Web AS Java system, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *System Security* → *System Security for SAP Web AS Java Only* → *Key Storage Service* → *Managing the Credentials and Trusted Certificates to Use SSL*

Defining Sequence for Performing Client Certificate Authentication

You determine the sequence in which SAP Web AS Java system checks client certificates during authentication.

You can use one of the following:

- Rule-based

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *User Authentication and Single Sign-On* → *Authentication on the J2EE Engine* → *Configuring Authentication Mechanisms* → *Using Client Certificates for User Authentication* → *Modifying Client Certificate Authentication Options*

- Maintained mappings

Note: If you use this option and you maintain the mapping in the host of the Duet Server, then make sure that you select No password change required, for each user.

If the Windows and SAP user IDs are different, then you must maintain mapping for X.509 certificates on the Duet Add-On host. In this case, do not configure rule-based.

For more information, go to the SAP Help Portal at: *help.sap.com* → *SAP Library* → *SAP NetWeaver* → *Security* → *User Authentication and Single Sign-On* → *Authentication on the J2EE Engine* → *Configuring Authentication Mechanisms* → *Using Client Certificates for User Authentication* → *Maintaining the User's Certificate Information*

Configuring the Use of Client Certificates for Authentication in Duet

Windows users can log on to Duet using SSL and X.509 client certificates for authentication.

SAP Web AS Java system uses the JAAS login modules *ClientCertLoginModule* to perform the client certificate authentication and the certificate mapping.

Note: Do not perform this task, if you chose Maintained mappings. See the section above.

To configure the ClientCertLoginModule login module:

1. Start the *Visual Admin Console* using the file, *go.bat*, located in the path:
`<SAPJ2EEEngine_installation>\j2ee\admin\>`
2. From Visual Admin window, choose → *Server* → *Services* → *Security Provider* → *User Management*.
3. Click on the edit button (pencil icon) and choose *Manage Security Stores* and choose the *ClientCertLoginModule*.

4. Click *View/Change Properties*, and change the values:

Login Modules	Options
ClientCertLoginModule	<p>Find detailed information in the SAP Help Portal at: <i>help.sap.com</i> → <i>SAP Library</i> → <i>SAP NetWeaver</i> → <i>Security</i> → <i>User Authentication and Single Sign-On</i> → <i>Authentication on the J2EE Engine</i> → <i>Configuring Authentication Mechanisms</i> → <i>Using Client Certificates for User Authentication</i> → <i>Modifying Client Certificate Authentication Option</i>.</p> <p>Note: Perform this configuration, if you did not map the certificate.</p>

The above configuration does the following:

- The *ClientCertLoginModule* checks for a valid user certificate and determines the SAP Web AS Java system user ID, based on its configuration.

Configuring the Host of the Duet Server to use X.509 Authentication

After configuring the login modules, you must configure the host of the Duet server to use X.509 authentication.

To configure the Duet server as the ticket issuing system:

1. Start the *Duet Administration Control Panel*, using the following URL in your browser:
*http:<J2EE_Duet_Server_Host>:<J2EE_Port>
/webdynpro/dispatcher/sap.com/xapps~osp~fw~admin~launchpad~webdynpro
/AdminLaunchpadApp*
2. Click *Duet System Management* and select *Service Provider*.
3. Change the URL of the ticket issuer to:
https://<fully qualified domain name>:<https port number>/osp/TicketIssuer?x509
For example: *https://duetserver.duet.sap.mend:50001/osp/TicketIssuer?x509*

4. Change the values of the following properties:

Property	Description
Service Mapper URL (on Duet Server)	<p>Change the URL of the Service Mapper from:</p> <p><i>https://<fully qualified domain name>:<https port number>/ServiceMapperImplWS/Config1?style=document</i></p> <p>To:</p> <p><i>https://<fully qualified domain name>:<https port number>/ServiceMapperImplWS/x509Config?style=document</i></p> <p>For example: <i>https://duet4.msft.sap:55000/ServiceMapperImplWS/x509Config?style=document</i></p>
Service Provider URL (on Duet Add-On)	<p>Change the URL of the Service Provider from:</p> <p><i>https://<fully qualified domain name>:<https port number>/MetadataPublisher/Config1?style=document</i></p> <p>To:</p> <p><i>https://<fully qualified domain name>:<https port number>/MetadataPublisher/x509Config?style=document</i></p> <p>For example: <i>https://duetAddOn.msft.sap:55000/MetadataPublisher/x509Config?style=document</i></p>

5. Click *Save*, and close the browser.
6. From the *Duet Administration Control Panel*, click *Add or Remove Business Applications*, and enter the administrator credentials of the SAP Web AS Java system on which the Duet server runs.
7. In the *Add or Remove Business Applications* editor, select one of the business applications from the list, and click *Remove* to delete the selected business application.
8. Click *Browse* and select the zipped file of the deleted business application.
9. Click *Add*, to restore it.
10. Publish the metadata from the Duet metadata service host. See the section “*Publishing the Metadata for Duet Business Applications*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on Service Market Place at: *service.sap.com/instguides* → *SAP xApps* → *Duet* → *Duet 1.0*

Configuring Trust in the Duet Landscape

The following is the sequence for configuring trust in the environments:

11. Configure trust between the Duet server environment and the Duet Add-On Environment.
- Note:** If you have configured your system to use X.509 authentication, skip this first process.
12. Configure trust between the Duet Add-On environment and mySAP ERP system.

3. Assign users to mySAP ERP roles in the User Management Engine (UME).

This is an alternative process for synchronizing roles in the Duet landscape. Typically, after mapping roles in the Duet System Management tool, you can synchronize their roles in other systems.

4. Synchronizing Roles in Duet Business Applications and mySAP ERP system.

For more information, see the section “*Configuring the Authorization Manager*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on SAP Service Market Place:
service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

Assigning Users to mySAP ERP Roles in the User Management Engine

From Microsoft Office Outlook® 2003, users can activate specific Duet business applications based on their roles.

The following is an alternative method to synchronizing roles in the Duet landscape using the Duet System Management tool.

After mapping the default roles in the Duet business applications to mySAP ERP role, you must assign users to the roles in mySAP ERP using the SAP User Management Engine.

Doing so allows you to automatically assign the users to the default roles in the Duet business applications.

Note: mySAP ERP roles display as groups in the user administration console.

The relevant groups to use have the following prefix: *DUET.ERP*. These are created in the UME from the mapping in the Role management category.

To assign users to mySAP ERP roles:

1. Start the User Administration Console using the following URL:
http://<Duet Server Host Name>:<J2EE HTTP PORT>/useradmin
Where <Duet Server Host Name>:<J2EE HTTP PORT> refers to the host name of the Duet Server and the port number of the J2EE engine.
2. Click *Groups*. The *Create/Maintain Groups* screen displays
3. In *New Search*, enter the prefix *DUET.ERP**, to search for all mySAP ERP roles for Duet that have been defined in the UME. For example, *DUET.ERP.QEF.200.ZESS*
4. Click the *Search* icon. The search results display in the Groups box.
5. Select the role (group) for which you want to assign users, and choose *Assign Users To* icon, or *Assign Groups To* icon. A list of currently assigned users and groups displays.
6. Click the plus icon (+) in top right of the panel containing the displayed list.

7. Search for the users, or groups you want to assign to the selected role.
8. Select the users by selecting the checkboxes beside the user name, and click *Select*.
9. The object appears in the list of assigned objects. If you make a mistake or want to remove an object, select the object and choose Remove.

Deploying the Duet Role Synchronization Agent

The role synchronization agent is available in the SAPInst tool, to enable you to use portal roles for Duet users across the Duet system landscape.

Note: This is optional, use only if you are running an SAP NetWeaver Portal in your landscape.

You deploy the role synchronization agent in the portal host.

To deploy the role synchronization agent:

1. Double click *sapinst.exe*, in the following path to start SAPInst: ...\\SAPINST\\NT\\I386
SAPInst GUI starts automatically by displaying the *Select Duet Components* screen.
2. Select the *Duet Role Synchronization Agent*, and click *Next*. The *Specify Details of the Duet Role Synchronization Agent* screen displays.
3. Enter the following:

Property	Explanation
Central Instance Host Name	Enter the host name of the computer. For example: Duet001
Message Server Port	Enter the Message Server port for the J2EE engine. The default Message server port for J2EE is 8101.
User	Enter the administrator user name for the J2EE engine. The default name is Administrator.
Password	Enter the password for the administrator user of the J2EE engine.

4. Click *Next*, the *Specify Details of the Software Deployment Manager* screen displays.
5. Enter the following details for the SDM:

Property	Explanation
SDM Host	Enter the host name of the computer in which you are installing the role synchronization agent components. For example: <i>Duet001</i> .
Port	Enter the port number of the Soft Deployment Manager (SDM). The default is <i>50018</i> .
Password	Enter the password for SDM.
Settings for the	Choose <i>Update any version of the SCAs/SDAs</i> . The

SCAs/SDAs	<p>following are the options:</p> <ul style="list-style-type: none"> • Update only the old versions of the SCAs/SDAs • Update same or older versions of the SCAs/SDAs • Update any version of the SCAs/SDAs
-----------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6. Click *Next*. The *Specify Details of the Duet Server* screen displays.
7. Enter the host name, Message Server HTTP port number, the P4 port number, and the administrator logon details of the SAP Web AS Java system on which the Duet server runs.

Note: Make sure that the Duet server is running when you perform this step.

8. Click *Next*, the *Specify Details of the Load Balancing Mechanism-Duet Server* screen displays.

Enter the details of the load balancing mechanism in the Duet Add-On environment:

Property	Explanation
Load Balancer Host Name	<p>Enter host name of the load balancing mechanism in the landscape in which you deployed the Duet server.</p> <p>Note: Do not use the IP Address. Where there is no load balancing mechanism, enter the host name of the J2EE central instance.</p> <p>For example: <i>myrolesynchhost</i></p>
Domain name	<p>Enter the domain name of the load balancing mechanism in the landscape in which you deployed the Duet server.</p> <p>Note: Where there is no load balancing mechanism, enter the domain name of the J2EE central instance.</p>
Load Balancer HTTP Port	<p>Enter the port number or the load balancing mechanism.</p> <p>Note: Where there is no load balancing mechanism, enter the HTTP port number of the J2EE central instance. The default is 50000.</p>
Load Balancer HTTPS Port	<p>Enter the port number or the load balancing mechanism.</p> <p>Note: Where there is no load balancing mechanism, enter the HTTPS port name of the J2EE central instance. The default is 50001.</p> <p>Where you do not use a custom HTTPS port in the load balancing mechanism, enter the HTTP port.</p>

After you have entered all required input parameters, SAPInst starts the installation and displays the progress of the installation.

When the installation has successfully completed, the screen Finished successfully is displayed. The Finished successfully screen provides the location of the log files of SAPInst.

Chapter 5: Configuring mySAP ERP for Duet Business Applications

This section describes the configuration settings in the mySAP ERP environment for use with Duet.

Preparing mySAP ERP System for Duet

You prepare the SAP system by installing the required support packages for configuring mySAP ERP system to work with Duet.

Hardware and System Requirements

- The mySAP ERP system landscape has a minimum of 1GB free hard disk space.
- You have installed mySAP ERP 2004 with Support Package 12, or higher.
- You have read SAP note **938595** about ECC-SE501. SAP Notes are available in the SAP Service Marketplace at: service.sap.com/notes.

Note: If you have installed Duet components from previous versions in your existing mySAP ERP system, you must remove them before preparing the mySAP ERP landscape for the current release of Duet.

Remove Previously Installed Support Packages in mySAP ERP

To remove previously installed support packages for configuring mySAP ERP system to work with Duet:

1. Obtain the package SAPK-105BGINOSPABAP from the SAP Service Marketplace at service.sap.com/swdc.
2. Install it in the existing mySAP ERP system, and then install SAP Basis SP17.

Configure Support Packages in mySAP ERP to Work with Duet

Run the Duet check tool to obtain information about the required ABAP components to install for Duet. (For information on using the tool, see SAP note number **946455**.)

Note: Before installing ABAP components for the current Duet release, remove any ABAP components from previous versions of Duet.

You must install the following patch levels in your existing mySAP ERP 2004. You can download the components from the SAP Service Marketplace at service.sap.com/swdc:

Component	Release	Level	Highest Support Package	Description
SAP_BASIS	640	18	SAPKB64018	SAP Basis component
SAP_ABA	640	18	SAPKA64018	Cross-application component
SAP_BW	350	18	SAPKW35018	SAP BW 350
SAP_APPL	500	13	SAPKH50013	Logistics and Accounting
SAP_HR	500	22	SAPKE50022	Human resources
EA-APPL	500	12	SAPKGPAC12	SAP R/3 Enterprise PLM, SCM, Financials
EA-HR	500	22	SAPKGPHC22	SAP R/3 Enterprise HR Extension
ECC-SE	501	02	-	ESA FAST TRACK (ERP) 2004
BI_CONT	353	5	SAPKIBIFP5	Business Intelligence Content Note: Optionally install this component to enable SAP BW for use with Duet.
PI_BASIS 2005_1	640	7	SAPKIPYJ67	Basis plug-in

Note: Ensure that the correct time zone is specified in mySAP ERP, and that the time zone for clients corresponds to the time zone defined in the mySAP ERP system.

To maintain the time zone for each client in mySAP ERP system, log on to the SAP system, and from the menu select *User Profile* → *Own Data* → *Defaults* tab. Set the time zone in *Personal Time Zone*.

You must configure each SAP system in which you install the required ABAP components for use with Duet. The configurations enable the SAP system to work with Duet business applications.

Information for configuring SAP system to work with the Duet business application is available in your mySAP ERP environment.

To access help for a task in mySAP ERP:

1. Log on to the specific mySAP ERP or BI system you have configured for use with Duet.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide* or *OSP 1.0 Application Implementation Guide*.
5. Click on the *Favorite* button to add the selected guide to your list of favorites.

6. Select the guide in your favorites list, click the *Display IMG Structure* icon, and select *Duet 1.0*.

You can get specific information for configuring each task.

The following sections describe specific configurations using the appropriate Implementation Guide: *OSP 1.0 Implementation Guide* or *OSP 1.0 Application Implementation Guide*.

Settings for Leave Management

Once you have installed the Leave Management business application, you must configure your mySAP ERP environment to allow the business application to retrieve the data requested by users.

Requirements

- Add the mySAP ERP administrator user to the user data in the Microsoft Active Directory Service. This user configures the leave management application in mySAP ERP.
- Verify that there is content in the table `/OSP/T_MEND_EVNT`, and that the table is available in your productive client. This table is delivered with the Duet package. If it is not available in your productive client, then copy the contents from the table in client `000`.

To verify, use the transaction `SM30`, and enter the name of the view `/OSP/V_MEND_EVNT` to display the content of the table.

The following is the workflow to configure leave management functions in mySAP ERP:

1. Define an RFC destination to enable communication with the SAP Duet Add-On host.
2. Define a logical port that exposes the Java proxy classes (in the mySAP ERP environment) to the SAP Duet Add-On components.

Note: Each logical port points to one RFC destination.

3. Define default settings for leave management.
4. Schedule default reporting in leave management.

Defining an RFC Destination for Leave Management

The RFC destination you configure allows connectivity between the specific mySAP ERP system and the SAP Web Application Server Java system in which you deployed the SAP Duet Add-On.

To define and configure the RFC destination in mySAP ERP:

1. Log on to the mySAP ERP system in which you installed the ABAP Add-On components.
2. From the system command line, enter the transaction `SM59`.
3. Click *Create*, and enter the following example values in the fields:

Field	Value to enter
-------	----------------

RFC Destination	<i>Connect to J2EE</i>
Connection type	<i>G (HTTP Connection to Ext. Server)</i>
Description	<i>RFC destination from Addon to J2EE</i>

4. Select the *Technical settings* tab and enter the following values:

Field	Values
Target host	Enter the IP address of the Web Services Description Language (WSDL) for the Web service. This is typically the IP address of the host of the SAP Duet Add-On server. For example: <i>127.0.0.1</i>
Service no.	Enter the port number for the WSDL of the Web service. For example: <i>50000</i>
Path prefix	Enter <i>/WorkFlowIHWS/Config1?style=document</i> This is the path prefix for the WSDL for leave management.

5. Select *Logon/Security* tab and select *No Logon*.

6. Select *Send SAP Logon Ticket*.

7. Save the RFC destination service.

Creating a Logical Port for Leave Management

You must create a logical port for the RFC destination. This process exposes proxy classes in the specific mySAP ERP environment.

To create a logical port:

1. Log on to the SAP system in which you HAVE installed the ABAP components. The SAP Easy Access window opens.
2. Enter the transaction */nLPCONFIG* in the command line of the SAP Easy Access window.
3. Enter the Proxy class */OSP/CO_WORK_FLOW_IHWSVI_DOCUM*
4. Enter a logical port name. This can be any alphanumeric string without spaces. For example, *Duet_LP*.
5. Select *Default port* to make it the default port.
6. Click *Create* and enter a description. For example, *OSP logical port*.
7. Select the *Call Parameters* tab.
8. In *HTTP Destination*, press F4 and select the RFC destination (created in the section above). For example, *CONNECT TO J2EE*.

Note: The RFC destination name is case-sensitive, and it is saved in the system using capital letters.

9. Save the logical port and activate it.

Customize Settings for Leave Management

Note: If you customized leave management business application in *Preview 1.0*, then change the following settings to Duet setting:

1. Do not use the *Mendocino Workflow template*; instead, use the ESS standard leave management template or an existing workflow template.
2. Un-schedule the following reports:
 - /OSP/WORKFLOW_SCHEDULER
 - /OSP/WF_LEAVE_BKT_CLEANUP

Schedule Notification Report in Leave Management

You can schedule the running of reports using your administrator user.

Note: Ensure that the user ID with which you schedule running of reports exists in the Microsoft Active Directory Service.

To schedule running of reports:

1. Log on to the SAP system. The SAP Easy Access window opens.
2. Enter the transaction *SM36* in the command line of the SAP Easy Access window.
3. Create a new job.

Note: You can use the Job Wizard.

4. In *Job Name*, enter a name and press *Enter*. For example, *OSP_leavescheduler*.
5. In *Report name*, enter */OSP/NOTIF_LEAVE_SCHEDULER*.
6. Set the job as periodic. We recommended that you set the value for *Frequency* by specifying *Every 15 minutes*.

Cleaning Up the Database Tables for Leave Management

Duet uses a book-keeping table that enables it to track mails and tasks already delivered to users. Over time, the table increases in volume and size. In order to maintain the volume and size of the table, you must clean up the database records.

To delete old records:

1. From the SAP Logon pad, select the system in which you have installed the ABAP components. The SAP Easy Access window opens.
2. Enter the transaction *SE38* in the command line of the SAP Easy Access window.
3. Create variants for the report using the name */OSP/MEND_LM_CLEANUP*.

First variant:

- Name of table for data cleanup: */OSP/T_IH_NOTIFS*
Stores all Duet events for all leave requests.
- Minimum Age (in Days): Specify a number that defines the age of records to be deleted.
For example, if the Minimum Age (value in days) is *90*, then all the records that are ninety days or older can be deleted by the system.

Second Variant

- Name of table for data cleanup: */OSP/T_MEND_LR*
Maintains all leave requests created in Duet.
 - Minimum Age (in Days): Specify a number that defines the age of records to be deleted.
4. Enter the transaction *SM36*, and create two jobs, one for each variant created in transaction *SE38*.
 5. Start the job creation wizard and enter the report name (for example, */OSP/MEND_LM_CLEANUP_Notifs* & */OSP/MEND_LM_CLEANUP_MendR*
 6. Enter the names of the variants created above, and schedule the report as a periodic job.

The recommended job frequency depends on the volume of leave requests handled in an organization.

Settings for Team Management

You must specify the number of levels and the depth to filter data in the team management business application. This defines the default hierarchical level and the total number of personnel to display in Microsoft Office Outlook® 2003.

Requirements

- You must assign specific authorizations to the employee roles for team management.

To specify the default settings for team management:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.

5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Application Flow Settings*, and click the activity icon for *Define Application Behavior Settings*.
7. Under *Solutions* select *Duet*.
8. Under *Applications* select *Team Management*.
9. Choose *Application Behavior* and specify a number for each of the following properties:
 - Depth: In team management, depth specifies a number which corresponds to the different levels of an organizational structure. (One is the highest, and all subsequent numbers represent lower levels.)
 - Plvar: Plan versions are used for displaying and maintaining organizational plans in different business applications.

Maintaining Employee Authorizations in their Roles in mySAP ERP

In mySAP ERP, you must maintain employee information and authorizations for the roles assigned to them.

You maintain records in a Records Management System (RMS). An RMS is a logical division of different business areas within records management.

Ensure that you have installed and customized a Records Management System. For more information, see the SAP Implementation Guide at: *SAP Customizing Implementation Guide → Cross-Application Components → General Application Functions → Records and Case Management → Basic Settings*

The following is the workflow to maintain employee authorizations:

- Verify that the records in the specific tables for creating and displaying the employee files exist.
- Maintain the authorization object for each user by determining the activities they can perform. This enables them to access data from the team management business application.

Verifying Records in Employee Files

Make sure that the following entries are present in the tables below:

- Open the table RMPSXML_ACTVTYT using the transaction */nse16*, and verify that the following entries exist. If they do not exist, enter them:

ACTIVITY	LANGU	LTEXT
OS	E	OSP: Export Mendocino
The above record in the table specifies the activity category.		

- Open the table RMPSXML_ACTVTY using the transaction */nse16*, and verify that the following entries exist. If they do not exist, enter them:

ACTIVITY	LTEXT
OS	OSP: Export Mendocino
The records in this table are text about the records in the activities in the table RMPSXML_ACTVTY.	

- Open the table RMPSXML_XSLT using the transaction */nse16*, and verify that the following entries exist. If they do not exist, enter them:

SPSID	ACTIVITY	XSLT_OUT
*	OS	OSP/RMPS_AKTE_REKURSIV_MODEL
Specifies the actual XSLT name.		

- Open the table, SCMGV_PARAM, using the transaction */nsm30*, and select *View SCMGV_PARAM*. Then enter the following:

ID	VALUE	Comments
OSP_MDC	RPS_MOD04	The actual name of the document class of the top level record model. The Function Module 'RMPS_API_RECORD_STRUCTURE' uses these entries to retrieve the definition of the top level record model.
OSP_MID	C0446D43C9AE9139E10000000A114735	The actual name of the Object ID of the top level record model.
OSP_REC	/OSP/RM_PS_SPS_RECORD _EE_FILE	The actual name of the top level record model.
AREA	S_AREA_RMPS	
CFWSPS	SRM_RM_PS_CLIENTFRAME WIN	
CFWSPSID	SRM_RM_PS_CLIENTFRAME_WIN	
ORGRMSID	S_RMS_RMPS	
ORGSPSID	RM_PS_SPS_ORGANIZER	
CASSPID	RM_PS_SP_CASE	
NOTSPID	RM_PS_SP_CASE_NOTES	
RECSPID	RM_PS_SP_CASE_RECORD	
VGNSPSID	RM_PS_SPS_VIEWGEN	

Maintaining Authorization Object for Users

Using the transaction `/npfcg`, you can maintain the roles for each user.

The following are the authorization objects to add to the role of each user:

Note: Where a user has only one profile, these authorization objects can be added to that profile. If not, we recommend creating a separate profile and assigning this profile to every user who needs to use Team Management.

- Under *RMPS: Access Record, Case, Document Org., Assignment of User*, specify the authorization object `ps_rmpsorg` and enter the following:

Auth. Object Field	Value to enter
Activity for authorization check	*
Key For authorization check (Document/Record)	*
Organizational level for authorization	Level 1
Authorization level	*
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND, /OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES

- Under *Record Management: Authorization for Documents Content*, specify the authorization object `S_SRMGS_CT` and enter the following:

Auth. Object Field	Value to enter
Activity	All activities
Document/Record	*
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND, /OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES
Attribute Value	*

- Under *Record Management: Authorization for Documents*, specify the authorization object `S_SRMGS_DC` and enter the following:

Auth. Object Field	Value to enter
Activity	All activities
Document/Record	*
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND,

	/OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES
Attribute Value	*

- Under *Record Management: Authorization for Attributes*, specify the authorization object S_SRMGS_PR and enter the following:

Auth. Object Field	Value to enter
Activity	All activities
Document/Record	*
Attribute Group	*
Attribute	*
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND, /OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES
Attribute Value	*

- Under *Record Management: Authorization for Versions and Variants*, specify the authorization object S_SRMGS_V and enter the following:

Auth. Object Field	Value to enter
Activity	All activities
Document/Record	*
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND, /OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES
Attribute Value	*

Under *SAP Record Management: General Authorization Object*, specify the authorization object S_SRMSY_CL and enter the following:

Auth. Object Field	Value to enter
Activity	All activities
RMS ID	S RMS PRO
Element Type ID	/OSP/RM_PS_SPS_DOCUMENT_MEND, /OSP/RM_PS_SPS_RECORD_EE_FILE, /OSP/RM_PS_SPS_RECORD_SUBFILES

Settings for Budget Monitoring

If you have installed the budget monitoring business application for Duet, then you must configure your mySAP ERP environment to allow the business application to retrieve data requested by users.

The following is the workflow to configure mySAP ERP for budget monitoring:

1. Define an RFC destination to enable communication with the SAP Duet Add-On host.
2. Define a logical port that exposes the Java proxy classes (in mySAP ERP) to the SAP Duet Add-On components. (**Note:** Each logical port points to one RFC destination.)
3. Configure ESA services.

Defining an RFC Destination for Budget Monitoring

The RFC destination you configure allows connectivity between the specific mySAP ERP system and the SAP Web Application Server Java system in which you have deployed the SAP Duet Add-On.

To define and configure the RFC destination in mySAP ERP:

1. Log on to the mySAP ERP system in which you have installed the ABAP components.
2. In the system command line enter the transaction *SM59*.
3. Click *Create*, and enter the following:

Field	Value to enter
RFC Destination	Enter a name. For example, <i>Connect BUMO to J2EE</i> . This name is case-sensitive.
Connection type	<i>G</i> (HTTP Connection to Ext. Server)
Description	RFC destination for BUMO to J2EE

4. Select the *Technical settings* tab and enter the following example values:

Field	Values
Target host	Enter the IP address of the WSDL for the Web service. You obtain this information from the WSDL file that you generated. For example: <i>127.0.0.1</i>
Service no.	Enter the port number for the WSDL of the Web service. For example: <i>50000</i> .
Path prefix	Enter <i>/ScheduleRVProcessing/ScheduleRVProcessingConfig?style=document</i> This is the path prefix for the WSDL for budget monitoring.

5. Select *Logon/Security* tab and select *No Logon*.
6. Select *Send SAP Logon Ticket*.
7. Save the RFC destination service.

Creating a Logical Port for Budget Monitoring

You must create a logical port for the RFC destination. This process exposes the proxy classes in the specific mySAP ERP environment.

To create a logical port:

1. Log on to the SAP system in which you have installed the ABAP components. The SAP Easy Access window opens.
2. Enter the transaction */nLPCONFIG* in the command line of the SAP Easy Access window.
3. Enter the Proxy class */OSP/CO_SCHEDULE_RVPROCESSING3*.
4. Enter a logical port name. This can be any alphanumeric string without spaces. For example, *LP_BUMO*.
5. Select *Default port* to make it the default port.
6. Click *Create* and enter the description. For example, *BUMO logical port*
7. Select the *Call Parameters* tab.
8. In *HTTP Destination*, press *F4* to select the RFC destination you created. For example, *CONNECT BUMO TO J2EE*. You defined this RFC destination.

Note: The RFC destination name is case-sensitive and is saved in the system using capital letters.

9. Save the logical port and activate it.

Releasing the Service Definitions of Enterprise Services Architecture

You must release the service definitions of the Enterprise Service-Oriented Architecture (ESOA) services in mySAP ERP for the SOAP runtime to activate the services in the system.

The services that you release have default values and should not be modified.

Requirement

- Make sure that your current kernel is 6.40 with patch number 118 or higher.
Download the patch from the SAP Service Market Place at service.sap.com/swdc
 - a. In the Web site of the SAP software distribution center, search all categories by typing *Kernel 6.40*.

- b. From the search result, choose the appropriate system: *SAP KERNEL 6.40 32-BIT*, *32-BIT UNICODE*, *64-BIT*, or *64-BIT UNICODE*.
- c. Choose the applicable operating system, and choose *#Database independent*. Search for the file *dw_** (*disp+work package*), where “*” is a wild card search string.

In addition, the user ID that runs ESOA services must be the same as the system user ID that is defined in the SAP Duet Add-on host.

See the section “*Creating an Administrator User ID in SAP Web AS Java System*” in the *Duet for Microsoft Office and SAP; SAP Installation Guide* on the SAP Service Market Place:

service.sap.com/instguides → *SAP xApps* → *Duet* → *Duet 1.0*

The following is a list of the service definitions to release:

Budget Monitoring Rule	Service Definitions
Cost Center Critical Posting	Release the following service definitions for Cost Center Critical Posting rule: <ul style="list-style-type: none"> ECC_CostCtrPosBudMonRuleChgRC ECC_CostCtrPosBudMonRuleIDQR ECC_CostCtrPosBudMonRuleROwQR ECC_CostCtrPosBudMonRuleSiOwQR
Cost Center Critical Variance	Release the following service definitions for Cost Center Critical Variance rule: <ul style="list-style-type: none"> ECC_CostCtrVarBudMonRuleChgRC ECC_CostCtrVarBudMonRuleIDQR ECC_CostCtrVarBudMonRuleROwQR ECC_CostCtrVarBudMonRuleSiOwQR
Internal Order Critical Variance	Release the following service definitions for Internal Order Critical Variance rule: <ul style="list-style-type: none"> ECC_IntOrdrVarBudMonRuleChgRC ECC_IntOrdrVarBudMonRuleIDQR ECC_IntOrdrVarBudMonRuleROwQR ECC_IntOrdrVarBudMonRuleSiOwQR
Internal Order Critical Posting	Release the following service definitions for Internal Order Critical Posting rule: <ul style="list-style-type: none"> ECC_IntOrdrPosBudMonRuleChgRC ECC_IntOrdrPosBudMonRuleIDQR ECC_IntOrdrPosBudMonRuleROwQR

	<ul style="list-style-type: none">• ECC_IntOrdrPosBudMonRuleSiOwQR
--	----------------------------------------------------------------------------------

To release the service definitions for SOAP runtime:

1. Log on to the specific mySAP ERP system in which you have installed the ABAP components.
2. In the system command line, enter the transaction *WSCONFIG* and press Enter.
3. In the *Definition* field, enter the name of a service definition, or press *F4* and select the service definition.

Note: The service definitions to release are listed in the table above.

4. From *Web Service* in the menu, choose *Create*.
5. Under *Release Web Services for Selected Definition*, enter a description for the Web service.
6. From *Goto*, select *Enter Call Address for Virtual Host*.
7. Specify the *Virtual Host*, the *URL*, and the details of the *Internet Communication Framework*.

Save your changes. The Web service is displayed in the list of the Web services released for the SOAP runtime.

Repeat all the above steps to release all the service definitions listed in the table above.

Customizing Alert Messages for Budget Monitoring

You can customize the elements that display in budget monitoring alert messages in Microsoft Office Outlook.

Note: The default values will be used if you do not customize the alert messages.

To customize the alert messages for budget monitoring:

1. Log on to the specific mySAP ERP or BI system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Application Implementation Guide*.
5. Click the *Display IMG Structure* icon and select *Duet 1.0*.
6. Expand *Budget Monitoring Administration* and click *Define Alert Content*. The *Display View "Rule Violation Type"* screen displays.
7. Select the *Rule Violation Type* to customize. For example, *CCCP – Cost Center Critical Posting*.
8. In the left pane, under *Rule Violation Types*, double-click *Regions in Alert*. *Alert Subject* displays as a region of the alert.

9. Select *Alert Subject*, and in the left pane double-click *Fields*. A list of the fields to customize displays.
10. Under *Active*, select the fields whose content you want to display in the alert subject, and press *Enter*.
For example, using the rule *CCCP – Cost Center Critical Posting*, the *Rule name* and *Posting Name* will be displayed in the subject of the alert mail.
11. Under *Fld Ord* (Field Order), define the order for displaying field values in the subject of the alert mail.
12. Under *Field Text*, enter the custom text to be displayed together with the actual data in the subject.
13. Under *Txt Pos* (Text Position), enter *SUFFIX* or *PREFIX* to specify if the customized text displays as a prefix or a suffix to the actual data in the subject of the alert mail.
14. Save the changes
15. Click *Preview* to display the customized text that displays in the subject of the alert mail.

Scheduling the Default Settings for Budget Monitoring

You must set the schedule, and enable running of the schedule for budget monitoring.

Note: To enable scheduled settings, you must activate the Scheduler Settings for reading and canceling of budget monitoring settings in the IMG.

To enable Scheduler Settings for budget monitoring:

1. Log on to the specific mySAP ERP system in which you have installed the ABAP components.
2. In the system command line enter the transaction */nSE38* and press *Enter*.
3. Enter the program name */OSP/IMG_WORKAROUND* and execute the program.

To schedule the default settings for budget monitoring:

1. Log on to the specific mySAP ERP or BI system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Application Flow Settings*, and click the activity icon for *Define Application Behavior Settings*.
7. Under *Solutions* select *Duet*.
8. Under *Applications* select *Budget Monitoring*.

9. Choose *Application Behavior* and specify a number for each of the following properties:

Properties	Explanation
CLEAR AGE OF NOTIFICATION	Specifies the number of days after which older alert messages can be deleted in the book keeping tables.
RULE VIOLATION ACTIVATION	Specifies the time in hours from which the rule violation process starts.
RULE VIOLATION FREQUENCY	Specifies the frequency of the rule violation process.
RULE VIOLATION START DATE	Specifies the starting date from which rule violation process starts.
RULE VIOLATION START TIME	Specifies the starting time (HHMMSS format) from which rule violation process starts.

Note: The properties CLEAR AGE OF NOTIFICATION and RULE VIOLATION FREQUENCY are the mandatory settings.

When set, the combination of the following properties have precedence over RULE VIOLATION START TIME:

- RULE VIOLATION ACTIVATION
- RULE VIOLATION START DATE

You must set a value for the property RULE VIOLATION START TIME, where you do not set values for the following properties:

- RULE VIOLATION ACTIVATION
- RULE VIOLATION START DATE

For example:

```
CLEAR AGE OF NOTIFICATION = 30 DAYS
RULE VIOLATION ACTIVATION
RULE VIOLATION FREQUENCY = 24 HOURS
RULE VIOLATION START DATE
RULE VIOLATION START TIME = 000010 HOURS
```

The configuration in this example starts the Budget Monitoring scheduler after 10 seconds, and the process is repeated every 24 hours.

Activating the Scheduled Settings in Budget Monitoring

After specifying the default settings for scheduling in budget monitoring, you must activate the schedule.

To activate the schedule:

1. Log on to the specific mySAP ERP system.

2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Title* field, enter *OSP 1.0 Application Implementation Guide*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Application Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Select *Scheduler Settings*.
7. Click the Activity icon beside *Read Budget Monitoring Scheduler Settings*.

Note: If you select *Cancel Budget Monitoring Settings*, it ignores the previous settings defined in the scheduler.

Settings for Reporting

You must configure mySAP ERP to send reports to Duet business applications. This enables information workers who have been designated to receive specific reports to access these reports from Microsoft Office Outlook.

- Ensure that you have read and applied SAP note number **944990**, in the SAP system. You can find SAP Notes in the SAP Service Marketplace at *service.sap.com/notes*
- Ensure that you have installed mySAP ERP 2004 SP 18 or above, and SAP Business Intelligence (SAP BW) 3.50 and above.

The following is the workflow to define settings for reporting:

1. Define an RFC destination to enable communication with the SAP Duet Add-On host.
2. Define a logical port that exposes the Java proxy classes (in the mySAP ERP environment) to the SAP Duet Add-On components. (**Note:** Each logical port points to one RFC destination.)
3. Define the number range interval for reporting objects.

Defining an RFC Destination for Reporting

The RFC destination you configure allows connectivity between the specific mySAP ERP system and the SAP Web Application Server Java system in which you have deployed the SAP Duet Add-On.

To define and configure the RFC destination in the mySAP ERP system:

1. Log on to the mySAP ERP system in which you have installed the ABAP components.
2. From the system command line, enter the transaction *SM59*.

3. Click *Create*, and enter the following:

Field	Value to enter
RFC Destination	Enter a name. For example, <i>Connect Report to J2EE</i> .
Connection type	G (HTTP Connection to Ext. Server)
Description	RFC destination for Report to J2EE

4. Select *Technical settings* tab, and enter the following:

Field	Values
Target host	Enter the IP address of the WSDL for the Web service. For example: 127.0.0.1
Service no.	Enter the port number for the WSDL of the Web service. For example: 50000
Path prefix	Enter, <i>/RepAdapterWS/Config1?wsdl&mode=sap_wsdl&style=document</i> This is the path prefix for the WSDL for reporting.

5. Select *Logon/Security* tab and select *No Logon*.

6. Select *Send SAP Logon Ticket*.

7. Save the RFC destination service.

Creating a Logical Port for Reporting

You must create a logical port for the RFC destination. This process exposes the proxy classes in the specific mySAP ERP environment.

To create a logical port:

1. Log on to the SAP system in which you have installed the ABAP components. The SAP Easy Access window opens.
2. Enter the transaction */nLPCONFIG* in the command line of the SAP Easy Access window.
3. Enter the Proxy class */OSP/CO_REP_ADAPTER_WSVI_DOCUM*
4. Enter a logical port name. This can be any alphanumeric string without spaces. For example, *LP_Report*.
5. Select *Default port* to make it the default port.
6. Click *Create* and enter a description. For example, *Report logical port*
7. Select the *Call Parameters* tab.

8. In *HTTP Destination*, press *F4* to select the RFC destination. For example, *CONNECT REPORT TO J2EE*. (This RFC destination has been defined in the section above.)

Note: The RFC destination name is case-sensitive and is saved in the system using capital letters.

9. Save the logical port and activate it.

Defining the Number Range Interval for Reporting Objects

You must define the number range interval for the shared memory to be accessed by all processes.

To define the interval for the number range:

1. Logon to the SAP system in which you installed the ABAP components. The SAP Easy Access window opens.
2. Enter the transaction */nSNRO*, in the command line of the SAP Easy Access window.
3. In the *Object* field, enter */OSP/ERP* and click *Number Ranges*.
4. Click *Change intervals*, and then click *Insert interval*.
5. Enter the following values in the dialog screen:

Property	Value to enter
No:	01
From number	1
To Number	999999

6. Click *Insert*, and save the setting
7. Repeat steps 3-6 for the following number objects: *RSOSPSETNM*, *RSOSPTSKNM*.

Configuring Communication Destinations for Role Management

You must configure role management in mySAP ERP by creating an RFC destination and a logical port for the RFC destination.

These communication destinations are required for the following scenarios:

- Leave management
- Reporting Administration

To define and configure the RFC destination in the mySAP ERP system:

1. Log on to the mySAP ERP system in which you have installed the ABAP Add-on components.

2. From the system command line, enter the transaction *SM59*.

3. Click *Create*, and enter the following:

Field	Value to enter
RFC Destination	Enter a name. For example, <i>Connect Role Management</i> . The destination name is case-sensitive.
Connection type	G (HTTP Connection to Ext. Server)
Description	RFC destination for role management

4. Select *Technical settings* tab, and enter the following:

Field	Values
Target host	Enter the IP address of the Web Service Description Language (WSDL) for the Web service. This is typically the IP address of the host of the SAP Duet server. For example: <i>127.0.0.1</i>
Service no.	Enter the port number for the WSDL of the Web service. For example: <i>50000</i>
Path prefix	Enter, <i>/RMWrapper/Config1?style=document</i> . This is the path prefix for the WSDL for reporting. Note: This service is available in the Duet server host. You must enable single sign-on using assertion ticket from mySAP ERP system to the host of the Duet server.

5. Select *Logon/Security* tab.

6. Select *No Logon & Send SAP LogonTicket*.

7. Save the RFC destination service.

To create a logical port:

1. Log on to the SAP system in which you have installed the ABAP Add-on components. The SAP Easy Access window opens.
2. Enter the transaction */nLPCONFIG* in the command line of the SAP Easy Access window.
3. Enter the Proxy class */OSP/CO_RMWRAPPER_VI_DOCUMENT*
4. Enter a logical port name. This can be any alphanumeric string without spaces. For example, *LP_Rolemgt*.
5. Select *Default port* to make it the default port.
6. Click *Create* and enter a description. For example, *Role management logical port*
7. Select the *Call Parameters* tab.

8. In *HTTP Destination*, press *F4* and select the RFC destination (created in the section above, *Defining an RFC Destination for Reporting*). For example, *CONNECT ROLE MANAGEMENT*.

Note: The RFC destination name is case-sensitive and is saved in the system using capital letters.

9. Save the logical port and activate it.

Note: If you get the message “Web service requires state management”, ignore the message and proceed to save and activate the logical port.

Settings for Reporting Administration

Once you have installed the Leave Management business application, you must configure your mySAP ERP environment to allow the business application to retrieve the data requested by users.

The following is the workflow to configure reporting administration settings:

1. Define an RFC destination to enable communication with the SAP Duet Add-On host. (**Note:** Make sure that the RFC destination points to the R/3 system in which you configure reports.)
2. Define a logical port that exposes the Java proxy classes in the mySAP ERP environment to the SAP Duet Add-On components. (**Note:** Each logical port points to one RFC destination.)
3. Define a number range interval.
4. Configure Role Management in the mySAP environment.

Defining Duet Logical RFC Destination for Reporting Administration

You define reports by creating a report catalog, for which you specify the report definitions. You must create a Duet logical RFC destination for the report catalogs you want to define.

To define a Duet logical RFC destination:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration*

7. Click the activity icon for *Create Duet Logical RFC Destination* and enter the following information:

Property	Description
Duet Logical RFC Destination	Enter a name. This is a logical RFC destination name used only in Duet. Duet Logical RFC destination maps to the RFC destination for reporting using a one-to-one relationship. For example, <i>Connect Report Admin</i> .
Duet Logical RFC Dest Description	Enter a brief description of the Duet Logical RFC destination. For example, <i>Report Admin</i> .
System RFC Destination	Press F4 and select the RFC destination you created for reporting. For example, <i>CONNECT REPORT ON R/3 SYS</i> . Note: Make sure that the RFC destination points to the R/3 system in which you have configured reports.

Note: Duet Logical RFC destination and System RFC destination must maintain a one-to-one relationship.

In addition, do not create two Duet Logical RFC destinations for the same system RFC destination.

Settings for Report Catalogs

For a report catalog, you must ensure that you have first created and defined an RFC destination, specified TimePoints, and managed data change events for the SAP system and Duet.

Note: The default values will be used if you do not configure the TimePoints and the data change events.

To manage timePoints:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Define Time Points*.
7. In the *RFC Destination* field, press *F4* and select an RFC destination (for example, *Connect Report Admin*).
8. Under *Dialog Structure*, double-click *System Timepoints*. The list of all the system TimePoints is displayed.

9. Under *Active*, select the timepoints to allow or disallow for Duet and specify the *Duet Description* for each timepoints. Save the changes.
10. Under *Dialog Structure*, double-click *Duet TimePoints*.
11. Click *New Entries* to create scheduling options to be used in Report catalog and check the *Active* checkbox.
12. Save the Duet TimePoints created.

To manage data change event:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Define Data Change Events*.
7. In the *System RFC Destination* field, press *F4* and select an RFC destination (for example, *Connect Report Admin*).
8. Under *Dialog Structure*, double-click *Data Change Events*. A list of the existing data change events displays.
9. Under *Active*, select the *Data change event* to allow or disallow for Duet.
10. For each data change event, enter a description.
11. Save your changes.

Creating a Report Category

You must create the report category for Duet, and specify the definitions of the report.

To create the report category:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Click *New Entries* and enter *Catalog ID*. For example, *BUMO*. The catalog ID can take a maximum of four characters. Provide a name that relates to the content of the report.

Note: You cannot enter the same Catalog ID twice.

8. In *Short Text*, enter a description for the new report catalog (for example: Budget reports for managers).
9. Click *Save*.

Specifying Report Definitions

After creating the report category, you must specify the definitions of the report.

To create the report category:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Select a *Report Catalog*. For example, *BUMO*.
8. Under *Dialog Structure* double-click *Report Selection*.
9. Click *New Entries* and enter the following:

Property	Description
Duet Logical RFC Destination	Enter the Duet logical RFC destination of the system in which the report is located, or press F4 and select from the list displayed. For example, <i>Report Admin</i> .
Source System	Specify the type of the system on which to base the report (ERP or BW).
Report Type	Specify the type of report based on the system selected (ERP or BW). If you select BW, then the report type can be any of the following: <ul style="list-style-type: none">• Web Template• Query• Workbook If you select ERP, report types are: <ul style="list-style-type: none">• ALV• Non-ALV

Report Name	<p>Enter a name for the report. For BW, press F4 and select an entry.</p> <p>Press <i>Enter</i> to get the details of the report.</p>
Forwarding Option	<p>Select the option to forward the report to Microsoft Office Outlook for users. This is a mandatory option.</p> <p>It can be one of the following:</p> <ul style="list-style-type: none"> • No Forwarding Prevents recipients of the report from forwarding the report template and content of the report to others. • Forward as Report Template Allows recipients of the report to forward the report template to others. Sensitive data, however, is hidden from the recipients. • Forward as File Allows recipients to send the content of the report as a file, which can include sensitive data. • Forward as Template and/or file Allows recipients of the report to choose the forwarding option. It is either Forward as Report Template or Forward as File. <p>To select the report delivery type, press F4.</p>
Report Delivery Type	<p>Specifies how the report is delivered to users.</p> <p>It is a mandatory option. Depending on the report type, you set the delivery type.</p> <p>The delivery types available are based on the system:</p> <ul style="list-style-type: none"> • ERP - The delivery type currently available for ERP reports is DUET REPORT. <p>The following are the delivery types available for BW reports:</p> <ul style="list-style-type: none"> • Web Template - (HTML ZIP, DUET REPORT, MHTML) • Query- (HTML ZIP, Duet Report, MHTML) • Workbook - EXCEL <p>Press <i>Enter</i>, select a sub type for the report, and press <i>Enter</i> again.</p>
System Timepoint Flag	<p>Set this option to allow users to schedule the report to run later based on the available system timepoints.</p> <p>Make sure that system timepoints are selected for this report.</p>
Scheduled Report Flag	<p>Set this option to allow users to schedule the report to run</p>

	later based on the available Duet timepoints and to allow users to create their own schedules for the report. Ensure that Duet timepoints are selected for this report.
Data Change Flag	Set this option to allow users to schedule the report to run when Data Change Events occurs. Make sure that Data Change Events are selected for this report. Applicable to report of type BW, and data change events are available for the report in the BW system.
UnScheduled Report Flat	Set this option to make the report available immediately.
Application	Specifies the Duet business application to which the report applies. Press F4, select the application for the report and press Enter. The Short Text for the report displays.
Report Title	Modify the default value for Duet.
Long Description	Define a description for the report.
Report Active Flag	Select to make the report available or unavailable to Duet. This option allows you to set aside a report for later use. When required, you can make it active and use it for Duet.
Role	Enter Duet role in this field. Users assigned to this role can access the report.
ALV Layout Variant	Specifies the default ALV Layout Variants for the report. This is possible if the report already has one or more ALV layout variants defined. This field is not applicable for BW reports as they cannot have any ALV variants.
Report Owner E-mail ID	Specify the email ID of the person responsible for the report. Allows recipients to send emails to the owner of the report.

10. Click *Documentation* to view the report documentation if it has been created. The documentation is displayed as the *Long Description* in the report template.

Note:

- The report documentation is available only for ERP reports.
- The report documentation is available only if the above configuration is made in *Change* mode.

Configuring the Properties of the Report

After specifying the definitions for the report, you modify its properties.

To configure the properties of the report:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Select a *Report Catalog*. For example, *BUMO*.
8. Under *Dialog Structure*, double-click *Report Selection* and select the report (for example, *RHPAYSC0*).
9. Under *Report Selection*, double-click *Parameter Behavior* and modify the following:

Parameter	Description
Parameter	Specifies the name of the parameter as declared in the report. It is not editable.
Description	Specifies the text describing the parameter as declared in the report. It is not editable.
Parameter Type	Specifies the type of the parameter as declared in the report. It is not editable.
Data Type	<p>Specifies the data type as declared in the report. You can edit some of the properties for this parameter. The following are the types:</p> <ul style="list-style-type: none"> • Select-Option The property is defined to be a control of type Select-Options in the report. • Parameter The property is defined as a regular parameter in the report. • Radio Button The property is defined to be a control of type Radio Button in the report. If the property is a radio button, the settings you apply to the first item, are also applicable to the rest of the group.

	<ul style="list-style-type: none"> • Check Box The property is defined to be a control of type Checkbox in the report. You can select and deselect as required. • Interval Applicable to BW, where you can specify a value for an interval for a parameter.
Radio Button Group	Specifies the name of the radio button group as declared in the report. It is not editable.
No - Interval	Applicable if the parameter type is Select-Options. If set, the Activate-To field is disabled for the parameter by default. It is not editable.
No- Extension	Applicable if the parameter type is Select-Options. If set, then multiple values cannot be entered for the parameter. It is not editable.
Activate	<p>Allows you to make the parameters available to Duet business applications.</p> <p>It contains the following:</p> <ul style="list-style-type: none"> • Activate From You can select this property, however if the parameter is defined as <i>Duet Mandatory</i> in the report, it cannot be edited. If it is selected by default, then you can select and deselect this property. If the property is selected, the parameter is available in Microsoft Office Outlook and the value <i>Low</i> can be entered to define the minimum threshold If it is not selected, then this property is not available for Duet business applications, and the property <i>Activate To</i> cannot be selected by default. The property for Display Option is disabled by default and cannot be changed. • Activate To If the property is selected, the parameter is available in Microsoft Office Outlook, and the value <i>High</i> can be entered to define the upper threshold If the property is of type Parameter, Radio Button, or

	Checkbox, and the property Activate From is mandatory, then this is not selected by default, and you cannot edit it.
Duet Mandatory	<p>Set this property to make the report parameters obligatory in Duet business applications.</p> <p>When you set this property, Microsoft Office Outlook users cannot delete any item from the list of parameters with which the report is set to run.</p> <p>You cannot edit this property if it is set by default as mandatory in the report.</p> <p>You can edit the property if it is not mandatory by default in the report.</p>
Display Option	<p>You can set this property using the following:</p> <ul style="list-style-type: none">• Editable Set this property to enable users to customize the parameter.• Non-Editable When selected, the parameter is read-only and cannot be customized by users.• Hidden Set this property if you do not want users to see the parameter.• Disabled This option is set automatically if the parameter has been deactivated for Duet. If the property Activate From is not selected, then this property is set to 'Disabled' by default and you cannot edit it.
Duet Description	Set the default description of the parameter as defined for the report (this parameter can be edited).
Radio Group Description	Set this parameter for radio buttons only. Its default value is the name of the radio button group.

Setting Default Values for the Report

After modifying the parameters of the report, you can set default values for them.

Note: When entering default values for the parameters, ensure that the values entered conform to the metadata of the parameter. This metadata includes:

- Data Type
- Output length
- Internal length
- Decimals
- Negatives

Note: The default values for the date parameter should be in YYYYMMDD format. The default values for the time parameter should be in HHMMSS format.

To set the default values of the report:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Select a *Report Catalog*. For example, *BUMO*.
8. Under *Dialog Structure*, double-click *Report Selection* and select the report. For example, *RHPAYSC0*.
9. Under *Dialog Structure*, double-click *Parameter Default Value*, and enter the following:

Property	Description
Parameter	Specifies the parameter name. This field is read-only.
Output Length	Specifies the length for a value that is entered for a parameter. For decimals, it includes “,” or “.”
Internal Length	This indicates the internal length of the parameter.
Decimals	Specifies the maximum number of decimal places allowed in the parameter value. Applies only to the properties Decimal and Float. In all other cases, it is set to 0.
Negatives	Specifies if the parameter can accept negatives values or not. This is not applicable to properties that take only alphabetical text.

F4 Available	Indicates whether F4 help is available for the parameter. This is a reference for the administrator, and cannot be changed.
Sign	<p>Specifies the default sign (I or E) for the parameter as defined in the report.</p> <ul style="list-style-type: none"> • I: Stands for <i>Include</i>, the values for the parameter are the ones specified as <i>Default Value</i>. • E: Stands for <i>Exclude</i>, the values excluded for the parameter are the ones specified in the <i>Default Value</i>.
Condition	<p>Specifies the default condition for the parameter, such as the relation between the parameter and its value. For example, <, >, =</p> <p>Select any of the following conditions if the property is <i>Select-Option</i> or <i>Interval</i>: <i>EQ</i>, <i>NE</i>, <i>GT</i>, <i>GE</i>, <i>LT</i>, <i>LE</i>, <i>BT</i>, <i>CP</i>.</p> <p>If the <i>BT</i> condition is selected, the <i>High/To Value</i> must be selected. If the <i>High/To Value</i> is selected, the condition must be set to <i>BT</i>.</p> <p>For the properties <i>Parameter</i>, <i>Radio Button</i>, or <i>Checkbox</i>, this is set to <i>EQ</i> and cannot be changed.</p>
Low/From Value	<p>Specifies a minimum threshold as the default value. For radio buttons, select only one option in the group.</p> <p>If <i>Duet Mandatory</i> is selected for a parameter or if <i>Display Option</i> is set to Non-Editable, then <i>Low/From Value</i> must be specified.</p>
High/To Value	<p>Specifies the upper threshold as the default value.</p> <p>To edit this property:</p> <ul style="list-style-type: none"> • The property must be of type <i>Select-Options</i> or <i>Interval</i>. In addition, the property <i>Activate To</i> must be selected in the <i>Parameter Behavior</i> screen. Also, if you are setting a range for the parameter, then <i>Condition</i> must be set to <i>Between</i> (BW). • This property is not available if the property type is <i>Parameter</i>, <i>Radio Button</i> or <i>Checkbox</i>. Or, the property type is <i>Select-Options</i>, or <i>Interval</i> but <i>Activate To</i> is deselected in the <i>Parameter Behavior</i>.
Multiple Values	<p>Specifies that there are multiple values for the parameter. This field cannot be edited.</p> <p>Also, if multiple values have been entered for a parameter, you can modify the values only using <i>Parameter Multiple Values</i>.</p>

Setting Multiple Values for a Parameter

You can enter multiple values for a parameter after you have selected it.

Note: You cannot enter multiple values for a parameter if:

- You do not enter its default value
- The parameter type is not Select-Options
- You have set No-Extension for the parameter

Note: When entering multiple values for the parameters, ensure that the values entered conform to the metadata of the parameter. This metadata includes:

- Data Type
- Output length
- Internal length
- Decimals
- Negatives

When you enter multiple values for a parameter, you cannot set parameter values for the following fields in the *Parameter Default Values* node (since they are disabled):

- Sign
- Condition
- Low/From Value
- High/To Value

To set the multiple values for a parameter:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Select a *Report Catalog*. For example, *BUMO*.
8. Under *Dialog Structure*, double-click *Report Selection* and select a report (for example, *RHPAYSC0*).
9. Under *Dialog Structure*, double-click *Parameter Default Values* and select the parameters.
10. Under *Parameter Default Values*, double-click *Parameter Multiple Values*, and enter the values.

Managing System Timepoints

You must manage the system timepoints for a report. You configure system timepoints as follows:

- Create a background job and define a schedule for it.
- Define and subscribe the system timepoints for a report.

You set the system timepoints after you have specified the default values for the report.

Before you define the system timepoints for a report, you must define a schedule for them. You define scheduling for the system timepoints by creating a background job for it.

Create background jobs using the following naming format: *TP_BROADCASTING_<ID>*. *TP_BROADCASTING_* must precede each name; however, you must define the ID to use.

For example, *TP_BROADCASTING_ERPReport001*.

To define the schedule using background jobs:

1. Log on to the specific mySAP ERP system, and in the system command line, enter the transaction *SM36* and press *Enter*.
2. Under *General data* in *Job name*, enter a name for the new background job. For example, *TP_BROADCASTING_ERPReport001*.
Note: Do not change the default values for *Job class*, *Status*, and *Exec. Target*.
3. Choose *Start condition*. The *Start Time* dialog box displays.
4. Choose *Date/Time* and enter the values.
5. Select *Periodic job*.
6. Choose *Period Values*. The *Period Values* dialog box displays the following values:
 - Hourly: occurs every hour.
 - Daily: occurs every day.
 - Weekly: occurs once week.
 - Monthly: occurs once month.
 - Other periods: occurs at a specified period.
7. Select the schedule you want and choose *Save*.
8. From the screen *Define Background Job*, choose *Step*. The *Create Step 1* dialog box displays.
9. In Program name under *ABAP* program, enter the following names to create two steps for the job with the following:
 - *RSRD_BROADCAST_FOR_TIMEPOINT* (For BW)
 - */OSP/TIMEPOINT_PROCESS* (For ERP)
10. Choose *Save*, and from *Job* in the *Define Background Job* menu bar, choose *Save*.

To define and subscribe a system timepoint for a report:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Define Time Points*.
7. Choose *Dialog Structure* → *RFC Destinations* → *System Time Points*. The list of timepoints are fetched from the system and displayed.
8. Modify the *Duet Description* parameter for the timepoints as required. Timepoints which have *Active* flag selected for Duet are made available.
9. Choose *Save*.
10. Choose *Refresh* to refresh the timepoints data.
11. Go to IMG and select *Duet 1.0* → *Report Administration* → *Create Report Catalogs*.
12. Under *Dialog Structure* select *Report Catalog* → *Report Selection*, and select the report (for example, *BUMO*).
13. Double click *System Timepoint* and click *New Entries*.
14. Press *F4* and select a timepoint from the list of available system timepoints displays.
15. Selected timepoints for a report are available in Microsoft Office Outlook only where the System Timepoint is set to *Active* during the definition of the report (Report Selection). Choose *Schedule*, and enter the following:

Property	Description
Timepoint Event ID	Press F4 and select the Timepoint Identifier.
Duet Description	Specify the description for the timepoint.
Timepoint Status	Specify the status of the timepoint. Set to Active to make the timepoint active.
Sort Order	Specify the sorting order for displaying timepoints. Sort using numeric values, where one indicates the ascending order.
Active	Select to make the timepoint available in Microsoft Office Outlook.

16. Click *Save*.

Managing Duet Timepoints

You must manage the Duet timepoints to apply for reports. You set the default Duet timepoints, after you have configured the system timepoints to be displayed in Microsoft Office Outlook® 2003.

To define and subscribe a Duet timepoint for a report:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Define Time Points*.
7. Choose *Dialog Structure* → *RFC Destinations* → *Duet Time Points*, and click *New Entries*.
8. Enter the following:

Property	Description
Schedule No	Enter a number for the schedule. For example, 123.
Start date	Specify the start date for the schedule.
Start time	Specify the start time for the schedule.
Scheduling Options	Press F4 to specify the schedule: yearly, daily, monthly or weekly.
Frequency	Specify how often the schedule runs. It takes 0 or 1, where 0 indicates daily, and 1 indicates monthly. For example, select 1 to indicate every month when the Scheduling Options is set to Monthly.
Daily scheduling Option	Press F4 to specify the monthly schedule frequency for the timepoint. Select whether the timepoint activity should run at the interval of the specified number of days (example, every 6 days) or on specified days of the week (example, every Monday and Thursday)
[Monday... Sunday]	Select the days of the week when the timepoint activity should run.
Day of the month	For monthly timepoint activities, specify the day of the month when it should run.
Month	For annual timepoint activities, specify the month when it should run.
Timepoint Active	Select to make the timepoint available in Microsoft Office Outlook for Duet.
Description	Enter a description for the Duet Timepoint.

9. Click *Save*.

10. Go back and choose the *Report Catalog*. For example, *BUMO*.
11. Double click *Report Selection* and select the report.
12. Under *Dialog Structure*, double-click *Duet Time Points*.
13. Choose *New Entries*, and in the *Timepoint Number* press F4. A list of Duet timepoints that have been defined for the current Duet Logical RFC are available.

Selected Duet timepoints for a report are available in Microsoft Office Outlook only if you have configured the Duet Timepoint to be Active during the definition of the report (Report Selection).

14. Enter the following:

Property	Description
Schedule Number	Press F4 and select the Schedule.
Schedule Description	The description for the timepoint is displayed.
Sort Order	Specify the sorting order for displaying timepoints. Sort using numeric values, where one indicates the ascending order.
Active	Select to make the Duet timepoint available in Microsoft Office Outlook.

15. Choose *Save*.

Managing Events Data Change for Business Intelligence Reports

You must manage the events data change only for Business Intelligence (BW) reports.

An event signals that a particular situation has occurred in the system and specific background processing that is waiting for this event must be activated accordingly.

Events data change are associated with a process chain, which is a sequence of processes waiting in the background for an event.

You configure events data change by creating a variant of process chain, defining a schedule, and activating it.

For more information about creating a process chain, go to the SAP Help Portal at:

help.sap.com → *SAP Library* → *SAP NetWeaver* → *Information Broadcasting* → *Information Broadcasting* → *Tasks for System Administration* → *Including an Event Data Change in a Process Chain*

To create a variant for a process chain and define the schedule:

1. Log on to the specific mySAP BI system and in the system command line, enter the transaction *RSPC* and press *Enter*. The *Process Chain Maintenance Screen* displays.
2. Choose *Create (F5)* to create a new process chain.

3. Enter a name for the process chain and choose the check mark. *Insert a Start Process* dialog displays. Create a Process variant as the start process of the chain.
4. Choose *Create* and enter a name and description for the variant.
5. Choose *Change Selections*.
6. Choose *Date/Time* to schedule date and time.
7. Select *Periodic job*.
8. Choose *Period Values*. The *Period Values* dialog box displays the following values:
 - Hourly: occurs every hour.
 - Daily: occurs every day.
 - Weekly: occurs once week.
 - Monthly: occurs once month.
 - Other periods: occurs at a specific period.
9. Select the schedule you want and choose *Save*.
10. Choose the *Process Types* icon to load all available process types.
11. Under *Load Process* and *Post Processing*, choose *Trigger Event Data change* (for broadcaster) to insert the variant of the process chain
12. Choose the *Create* icon to create a new event and give it a name and a description. The Info cube (Info provider) for which you created the event data change displays.
13. Press *F4* to select the Info cube (Info provider).
14. Choose *Save* to save the event data change you created. This inserts the newly created event data change in the process chain.
15. Choose *Start Process* and move the pointer over event data change.
16. Choose the *Activate* icon, and then the *Activate and schedule* icon. Select the relevant application server to activate and schedule.

You can test whether the event data change is functional. Testing involves modifying data from an Info cube. This task is summarized as follows:

17. Log on to the specific mySAP BI system and in the system command line, enter the transaction *RSRD_START* and press *Enter*.
18. Select the name of the Info cube for which you defined the event data change.
19. Choose the *Execute* icon with *P_ONLINE* checked.

To define and subscribe events data change for a BW report :

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.

4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Define Data Change Events*.
7. Choose *Dialog Structure*, → *RFC Destinations* → *Data Change Events*. The list of data change events from the system are fetched and displayed.
8. Modify the *Duet Description* parameter for the data change events as required. The data change events that have *Active* flag selected for Duet are made available.
9. Choose *Save*.
10. Choose *Refresh* to refresh the data change events data.
11. Go back to *IMG* and select *Create Report Catalogs*.
12. Choose the *Report Catalog*. For example, *BUMO*.
13. Double-click *Report Selection* and select the report.
14. Under *Dialog Structure*, double-click *Data Change Events*, and in the *Data Change ID* press *F4*. A list of the available data change events displays.

Selected Data Change Event for a report is available in Microsoft Office Outlook only if you have configured Data Change Event to be Active during the definition of the report (Report Selection).

15. Enter the following:

Property	Description
Data Change Event ID	Press F4 and select the Data Change Event Identifier.
Duet Description	Displays the description for the Data Change Event. This displays in Microsoft Office Outlook.
Data Change Event Status	Specify the status of the Data Change Event. Set to Active to make the data change event active.
Sort Order	Specify the sorting order for displaying data change events in Microsoft Office Outlook.
Active	Select to make the data change event available in Microsoft Office Outlook.

16. Click *Save*.

Example for Configuring BI for Duet

This section provides an example for configuring BI for Duet.

Prerequisites

- Make sure that the BI system has been correctly configured and connected to the Duet landscape.

- Verify the security and trust settings, RFC destinations settings, and port activation for reporting.
 - Make sure that the BI system is the Master system. You can verify this using the Service Map table in the Duet System Management. See “*Change Connection Settings to SAP Systems and Role*” on page 15.
1. Log on to the specific BI system and in the system command line, enter the transaction */nsimgh*, and press *Enter*.
 2. In the *Edit IMG Structure* screen, press *F4* to search, enter */osp/core* and then click *Execute*.
 3. Double-click the *OSP 1.0 Implementation Guide*.
 4. Select *Display* → *Duet 1.0* → *Report Administration* → *Create Duet Logical RFC Destinations*
 5. Select *New Entries*.
 - Enter a Duet Logical RFC Destination. For example: *DUET_LOGICAL_RFC_DESTINATION*
 - Enter a Duet Logical RFC Dest Descripiton. For example: *Duet BI System*
 6. Select a *System RFC Destination*. (An RFC to the BI system, for example if you are in system *QT4 client 334*, define a system RFC destination as *RFC Destination R/3 Connection*, using transaction *SM59* and specify the RFC destination here.)
 7. Go back to IMG, and select *Define Time Points*.
 8. Select the *Logical Destination* that you defined, and select *System Timepoints*
 9. Select *New Entries*.
 - Enter Timepoint Event ID: *DAILY_13HRS*
 - Description: *Daily @ 13:00*
 - Duet Description: *Daily @ 13:00*
 - Start Date: *8/22/2006*
 - Start Time: *13:00:00*
 - Minutes: *0*, Hours: *0*, Days: *1*, Weeks: *0*, Months: *0*
 - Active: *X*
 10. Select *Duet 1.0* → *Report Administration* → *Create Report Catalogs*.
 11. Select *New Entries*.
 - Enter a 4 letter Catalog ID
 - Enter a description for your Catalog
 12. Save your changes.
 13. Go to IMG structure, select *Report Selection*

14. Select *New entries*.
15. Select the Duet RFC where the report will be executed. In this case, it would be this same system.
 - Select Source System Type: *BI*, and press *Enter*
 - Select Report Type: *QU (Query)*
 - Select the report name. *OPA_C01_Q0101*
 - Select Forwarding Options: *No Forwarding*
 - Select Delivery Type: *Duet Report*
 - Select *System Time Point Flag X*
 - Select *Run Now Report Flag X*
 - Select the *Active Flag X*
 - Select Application: *REMA (Reporting Management)*
 - Role: *ALL.USERS*
16. Enter a description for your report.
17. In the *Dialog Structure Tree* on the left, select *System Timepoints*, then select *Add New entries*.
 - Select System Timepoint Event ID: *Daily_13HRS*, Select: *Active*, Select Sort Order: *1*
18. Check that the report can be displayed in Microsoft Office Outlook under *Report Templates*.

Managing Report Relations

From Microsoft Office Outlook, you can activate report templates using links for related reports in a report. Defining links for related reports in a report is optional.

You can associate related reports with each report in the report category.

To manage report relations:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Choose *Report Catalog* and select the report. For example, *BUMO*.
8. Under *Dialog Structure*, double-click *Related Reports* and press *F4* to make new entries. A list of the available report catalogs displays.

9. From the list, select the report in which you want to define the links. Details of Added Entries display, showing the name of the selected report.
10. In *Catalog ID*, press F4 and select the report to be associated with the selected report catalog.
11. Click *Save*.

Selected related reports for a report are available in Microsoft Office Outlook only if you have configured the related reports to be Active during the definition of the report (Report Selection).

Setting Report Attributes for Duet Business Applications

You can set attributes to be associated with Duet business applications. This configuration is optional. This attribute specifies the related reports that should be displayed when the primary report is shown in Duet.

Note: You associate an application's attribute with only one report. A message is displayed to the administrator if an association exists.

You can associate attributes to each report in the report category.

To associate a Duet application attributes to a report:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*. Select a report catalog.
7. Under *Dialog Structure*, double-click *Report Selection* and select the report to which the application attribute is to be assigned.
8. Double-click *Duet Application Attributes* and click *New Entries*. Specify the values for the corresponding fields.

Property	Description
Application	Press F4, select the business application for which you to set the attribute, and press <i>Enter</i> .
Application Attribute	Press F4, and select the attributes for the selected business application.

Note: An attribute for a business application can be associated with only one report.

9. Save the *changes*.

Settings for Pre-Delivered Reports

Duet generates pre-delivered reports with certain fixed data that customers can directly use.

Configuring Pre-Delivered Reports

Requirements to configure pre-delivered reports:

- You must have administrator rights in reporting administration.
- Map an actual RFC destination to the Duet Logical RFC destination DUET_LOGICAL_RFC_DESTINATION.
- Specify the role for which the reports are to be processed, (for example, REPORTINGSOLUTIONMANAGER).

To configure pre-delivered reports:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Report Catalogs*.
7. Under *Report Catalog*, select *SAP Pre-Delivered Reports*.
8. Under *Dialog Structure*, double-click on *Report Selection*. The list of pre-delivered reports is displayed.
9. Double-click on a report to configure the report. (Configuring the report is detailed in the *Specifying Report Definitions* section.)

Assigning Rule Violation Reports

Monitoring of cost centers and internal orders under a manager is based on specific rules. When a rule is violated, the manager receives an e-mail alert in Microsoft Office Outlook about the rule violation.

Managers can access reports relevant to the violated rules from specific links in the alert message. Such reports are referred to as triggered reports.

A triggered report must be assigned to specific budget monitoring rules. It must also conform to specific requirements for the operations of budget monitoring.

Defining Triggered Reports

The following is the flow for defining triggered reports:

1. Specify the rule violation type and assign reports to it.
2. Configure the reports for the rule violation type.

Specifying the Rule Violation Types

Rule violation types are preset and cannot be modified.

To specify the rule violation type and select the report:

Before specifying a rule type violation, ensure that you have created an RFC Logical Destination.

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Assign Rule Violation Reports*.
The following predefined rule violation types display:
 - CCCP Cost Center Critical Posting
 - CCCV Cost Center Critical Variance
 - IOCP Internal Order Critical Posting
 - IOCV Internal Order Critical Variance
7. Select a rule violation type.
8. Double click *Triggered Report Selection*. A list of reports displays.
9. Click *New Entries*, and enter the following

Property	Description
Duet RFC	Enter the Duet logical destination of the system in which the report located, or press F4 and select from the list displayed. For example, <i>Report Admin</i> .
Source System Type	Specify the type of the system (ERP or BW) on which to base the report.
Report Type	Specify the type of the report (ERP or BW) based on the system selected.
Report Name	Enter a name for the report. For BW, you select an entry after

	pressing F4. Press <i>Enter</i> to get the details of the report.
Forwarding Options	Select this option to forward the report to Microsoft Office Outlook users. This is a mandatory option. Press <i>F4</i> to select the report delivery type.
Delivery Type	Specifies how the report is delivered to users. It is a mandatory option. Depending on the report type, you set the delivery type. Press <i>Enter</i> , select a sub type for the report, and press <i>Enter</i> again.
Report Title	Modify the default value for the report title.
Long Description	Define a description for the report.
Report Active flag	Select to make the report available or unavailable to Duet. This option allows you to set aside a report for later use. When required, you can make it as Active and use it for Duet.
Role	Enter Duet role in this field. Users assigned to this role can access the report.
ALV Layout Variant	Specifies the default <i>ALV Layout Variants</i> for the report. This is possible if the report already has one or more ALV layout variants defined. This field is not applicable for BW reports as they cannot have any ALV variants.
Report Owner	Specify the email ID of the person responsible for the report.
E-mail	Allows recipients to send emails to the owner of the report.

Configuring the Report for the Rule Violation Type

You configure the report to which you have assigned rule violation types in one of the following ways:

- Specifying default values directly for the report parameter
- Specifying a context variable, which allows the parameter to be set based on the contextual data that is obtained when the rule violation occurs.

See “*Configuring the Properties of the Report*” for more information.

Setting Default Values for a Triggered Report

After configuring the parameters for the triggered report, you must set the default values for some of the parameters.

You can define a context variable (which allows the parameter to be set) based on the contextual data that is obtained when the rule violation occurs.

For context variables, you can set the following:

Data	Description
Context Variable From	<p>Allows you to set one of the context variables available for the particular rule violation type.</p> <p>At runtime, the data available for the context variable when the rule violation occurs is assigned <i>Low</i>, which is the default value of the report.</p>
Context Variable To	<p>Allows you to set to one of the context variables available for the particular rule violation type.</p> <p>The data available for the context variable when the rule violation occurs is assigned <i>High</i> as default.</p>

Note: You can set a value for the variable; you cannot, however, enter a default value and configure it to run based on contextual data.

See “*Setting Default Values for the Report*” for more information.

Setting Related Reports for a Triggered Report

You can associate related reports with each triggered report. This is an optional setting for the report.

Note: A triggered report cannot be associated with another triggered report.

Settings for a Chart Report

A chart report is a graphical representation of the content in a report. The chart that you configure for a report can be displayed in Microsoft Office Outlook.

You can assign chart reports to the budget monitoring rules. You must configure the chart reports that you assign to a rule.

The following is the flow for creating a chart based on the content of a triggered report:

1. Define a triggered report for the chart. See “*Defining Triggered Reports*” for more information
2. Define the settings for the chart.

Defining Settings for the Chart

The settings that you specify for a chart define how the chart is presented in Microsoft Office Outlook.

To specify the rule violation type and select the report:

1. Log on to the specific mySAP ERP system, and in the system command line, enter the transaction */nsimgh* and press Enter.
2. In the *Edit IMG Structure* screen, press *F4* to search, enter */osp/core* and then click *Execute*.
3. Double-click the *OSP 1.0 Implementation Guide*.
4. Click the *View* icon and select *Duet 1.0 → Report Administration*.
5. Select *Assign Rule Violation Reports → Chart Report Settings*.
6. Select a rule type.
7. Under *Dialog Structure*, double-click *Chart Report Selection* and choose the report.
8. Under *Dialog Structure*, double click *Chart Settings* and specify the following:

Setting	Description
Chart Type	Select the chart type. The following are the types: <ul style="list-style-type: none"> • Bar Chart • Line Chart • Pie Chart • Stacked Bar Chart
Series Type	Indicates if the records for a chart must come from rows or columns. Select either <i>Row Series</i> or <i>Column Series</i> .
Series Data Type	Indicates if individual records or an accumulation of the records in the selected series type is included in the chart. Select either <i>Cumulative</i> or <i>Individual</i> .
Sort Order	Defines the hierarchical position of the chart in the list of charts. Where there is more than one chart, this is the position of the chart in the hierarchy. For example: 1.
Start Table	Specifies the row number of a record in the chart report where the reading of the record starts.
Setting Active	Select this option to activate the settings for the chart.
X-Axis Title	Enter the text for the title of the x-axis.
Y-Axis Title	Enter the text for the title of the y-axis.

9. Click *Save*.
10. Select *Assign Rule Violation Reports → Chart Series*

11. Specify the following:

Setting	Description
Series Number	Defines the order in which the records in the selected series type must be displayed in the chart. For example: 1, and then 2.
Row/Column Number	This is the row/column from the table of the chart report's output data to be associated with the series number. This parameter indicates the row/column (of the data) to be used to construct the chart. Defines the exact numeric position of a row, or a column with the records for the chart. For example: 6, and then 7.

12. Click *Save*.

Configuring Default Triggered Reports and Charts for Budget Monitoring

Duet comes with preset triggered reports and charts that are delivered in the budget monitoring business application. You must configure these preset triggered reports and charts.

Requirements

- You must have administration rights in reporting administration.

In order to use the preset triggered reports and charts, configure the following:

- Map an actual RFC destination to the Duet Logical RFC destination.
- Specify the role of the user for whom budget monitoring is to be processed (For example, BUDGETMONITORNIG.MANAGER).

The following lists the names of the preset triggered reports:

- CCCP (Cost Center Critical Posting)
 - 0CCA_C11_Q0002 - Cost Center (Detail): Actual/Plan - Situation
 - 0CCA_C11_Q004 - Cost Center (Detail): Actual/Plan - Periods
 - 0CCA_C11_Q003 - Cost Center (Detail): Actual/Plan Quarters
- CCCV (Cost Center Critical variance)
 - 0CCA_C11_Q0002 - Cost Center (Detail): Actual/Plan - Situation
 - 0CCA_C11_Q004 - Cost Center (Detail): Actual/Plan - Periods
 - 0CCA_C11_Q003 - Cost Center (Detail): Actual/Plan Quarters
- IOCP (Internal Order Critical Posting)
 - 0OPA_C11_Q0002 - Internal Order (Detail): Plan/Actual

- IOCV (Internal Order Critical Variance)
 - 0OPA_C11_Q0002 - Internal Order (Detail): Plan/Actual

The following lists the names of the preset chart reports:

- CCCP (Cost Center Critical Posting)
 - 0CCA_C11_Q0002 - Cost Center (Detail): Actual/Plan - Situation
- CCCV (Cost Center Critical variance)
 - 0CCA_C11_Q004 - Cost Center (Detail): Actual/Plan - Periods
- IOCP (Internal Order Critical Posting)
 - 0OPA_C11_Q0002 - Internal Order (Detail): Plan/Actual

Mapping an Actual RFC Destination to the Duet Logical RFC Destination

You must map the preset Duet logical RFC destination to an actual RFC destination. The preset Duet logical RFC destination for the default triggered reports and charts is called, DUET_LOGICAL_RFC_DESTINATION.

First, create an actual RFC destination for business intelligence (BW), and then map it to the Duet logical RFC destination for the default triggered reports. See “*Defining an RFC Destination for Reporting*” on page 91, for more information.

To map a Duet logical RFC destination to the RFC destination:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Create Duet Logical RFC Destinations*.
7. Enter the following value:

Property	Description
System RFC Destination	Press F4, or enter the name of the RFC destination created for BW Reporting. For example, <i>CONNECT BWREPORT TO J2EE</i> . Note: Make sure that the system RFC you specify already exists.

Specifying the Default Role for Preset Triggered Reports

To specify the default role for preset triggered reports:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Assign Rule Violation Reports*. The following predefined rule violation types display:
 - CCCP Cost Center Critical Posting
 - CCCV Cost Center Critical Variance
 - IOCP Internal Order Critical Posting
 - IOCV Internal Order Critical Variance
7. Select a rule violation type.
8. Double click *Triggered Report Selection* and select a report.
9. Double click on it and enter the following:

Property	Description
Role	Enter Duet role in this field. Users assigned to this role can access the report.

Specifying the Default Role for Preset Chart Reports

To specify the default role for preset triggered charts:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Report Administration* and click the activity icon for *Assign Rule Violation Reports*.
7. Select *Assign Rule Violation Reports* → *Chart Report Settings*.
8. Choose the rule type.

9. Under *Dialog Structure*, double-click *Chart Report Selection*, double-click on a report, and enter the following:

Property	Description
Role	Enter the role for the budget monitoring business application. Users assigned to this role can access the report.

Settings for Time Management

In the mySAP ERP system, you must set the period for storing time records that can be edited by the employee.

Note: Before you configure time management settings, ensure that you have read and implemented note **905340**. SAP Notes are available in the SAP Service Marketplace at service.sap.com/notes.

To configure Application Behavior Settings for time management:

1. Log on to the specific mySAP ERP system you have installed the ABAP components.
2. In the system command line enter the transaction */nsimgh* and press *Enter*.
3. In the *Edit IMG Structure* screen, place your cursor in the *IMG Structure* field and press *F4* to search. In the *Package* field, enter */osp/core*, and click the *Execute* icon.
4. Double-click *OSP 1.0 Implementation Guide*.
5. Click the *Display IMG Structure* icon, and select *Duet 1.0*.
6. Expand *Application Flow Settings*, and click the activity icon for *Define Application Behavior Settings*.
7. Under *Solutions* select *Duet*.
8. Under *Applications* select *Team Management*.
9. Choose *Application Behavior* and specify a number for each of the following properties:

Properties	Explanation
ARCHIVING	Sets the duration for archiving time records for an employee in the SAP system. Employees cannot make changes in the recorded time when the archiving period expires.