

The Duet Implementation Kit

**Duet 1.5 SP1 Preview
October 2008**

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1 Overview of the Duet Implementation

One of the most common questions about Duet from customers is what does it take to implement.

The Duet Implementation Kit was developed to give general guidelines about the following aspects of a Duet implementation:

- 1) **How long** does a Duet project take for a Production Go-live as well as a Proof of Concept
- 2) **What skill sets** are required for the Duet Implementation Team as well as how much time does each team member need to dedicate.
- 3) **What tasks** are required in a Duet Implementation, how long will each task take and who needs to perform the task.

Based on this information, customer should be able to determine the budget required to implement Duet at their company.

This kit also includes an implementation worksheet that provides templates on documenting Duet landscape requirements, service and end user requirements and user ids as well as authorization objects to be used.

Sample timelines in MS projects showing example of tasks is also available for Production projects as well as Proof of Concept projects. The customer can enter their time estimates in these samples.

Though Duet takes a relatively short time for implementation, it is critical that the implementation project has the full support from the different IT groups, business groups as well as any operations teams currently responsible for company systems.

2 Implementation Project Duration Estimates

The following are some estimates of how long a Duet project generally takes to install, test and go to production. The timelines shown do not include the planning and preparation of the Duet landscape and scoping. This is hard to estimate as these tasks are very individual to a company's requirements.

PROJECT DURATION ESTIMATES	
Type of Project	Estimated Project Duration
Production Duet Project	6 – 9 Weeks
Proof of Concept	Approx. 2 weeks

ASSUMPTIONS	
Assumption	Description
All Prerequisites in place	Tasks for planning and preparation phase are done prior to start of project
Landscape Assumptions	<ol style="list-style-type: none"> 1) One SAP Backend System - 3 tier landscape (DEV, QA, PRD) 2) One Duet Server (most common) - 2 tier landscape (DEV & PRD) 3) One database used on Duet Server 4) Production Exchange and ADS being used 5) 2 Test client machines available 6) All hardware and software pre-requisites have been fulfilled within landscape 7) User Mapping is not required
SAP Backend System(s)	It is assumed that the SAP application associated to the Duet scenario being installed is fully functional and configured in the backend SAP system(s).
Team Resources	Team members have the required skills and are available for their tasks during the implementation. The Duet Expert is available 100% of the time for completion of the realization, final preparation and go-live portion of the project.
Duet Scenario	Estimate based on the Reports and Analytics Scenario
Number of Users	Production – based on 2 test users and 10 go-live users for 6 week project Proof of Concept – based on 2 test users
Training	Timelines do not include time required to train Duet end-users or Duet administrators
Mass Roll Out	Project will use the sample Microsoft Script for Mass Roll out with minimal changes required.

3 The Duet Implementation Team

This section gives an overview of what skill sets should be part of the Duet Implementation team. Although the implementation members are broken down by skill set, it is common that a team member can have multiple skill sets. Most common is that a Duet Expert will also have expertise in both Netweaver Java and ABAP. This team member will do the majority of the implementation of Duet.

If the Duet Expert is an outside consultant, it is recommended that a customer team member shadows the implementation to ensure knowledge transfer.

Other technical skill sets listed are not required full time throughout the project but only for specific tasks. For example, the Exchange/ADS expert is required mainly to create domain users with read-only access to the ADS, as well as a Kerberos authentication service user.

Customer	SAP / Microsoft / Implementation Partner
Executive Sponsor	
Project Manager	Project Manager
Project Team Members <ul style="list-style-type: none"> ▪ Duet Expert – Experience with Duet implementations. Recommend Duet expert to be engaged from SAP/Microsoft/Implementation Partner who will provide knowledge transfer to a designated Duet expert on the Customer side ▪ Business Experts – SAP ERP ESS/MSS, SAP CRM, SAP SRM, SAP BI etc. (depending on Duet scenarios being implemented) ▪ Netweaver Expert – Web AS JAVA and ABAP ▪ Technical Expert (eg. Microsoft ADS, Microsoft Office, Microsoft Exchange, Software Deployment, Domain Administration, IIS, MS SQL Server) 	

Executive Sponsor

As with most projects, an Executive Sponsor to champion the project is recommended. This can help secure funding, as well as provide an assurance that issues are escalated during the project.

Project Manager(s)

Assigning a Project Manager will also help keep the project on track. Ideally, there should be a Project Manager from both the SAP side and the customer side and the Customer Project Manager would be the main driver.

Duration: Part time throughout the project with most of the tasks in the Planning phase. The main purpose for the rest of the phases is to monitor progress and facilitate issue resolution.

Skill Set: Project Management Experience

Business Expert(s)

Having someone on the project who can provide the functional (business configuration) expertise is important. The business expert(s) must ensure that the application associated to the Duet scenario being installed is fully functional and configured in the backend SAP system(s) so that they can be executed independently of Duet. For example, for the Time Management scenario, a business expert will ensure that time entries can be submitted correctly via the CATS application in the SAP Backend system.

Duration: Part time during Planning, Preparation and Testing phases. They should be available for the Installation phase just in case there are issues in the backend functionality.

Skill Set: This depends on the scenario that is implemented. For example, if the Duet HR scenarios are being implemented (Time and Leave Management etc), then the business expert must have expertise in SAP HCM, ESS/MSS and CATS applications.

NetWeaver Expert(s) -Web AS JAVA and ABAP

Resources with expertise with the SAP Web AS ABAP and Java are required.

Duration: Part time throughout project with specific tasks but must be available based on any on demand requests.

Skill Set:

ABAP: SAP Backend System Patching / Transports/Communication configuration, SAP Authorization (User Setup)

Web AS Java: J2EE installation, security configuration based on the NetWeaver Java Web Application Server with configuration of trust systems, connecting Active Directory to User Management Engine (UME), Kerberos for encrypted authentication etc.

Technical Expert(s)

Resources with expertise with various Microsoft components are required.

Duration: Not required full time for the entire project but must be available for any specific task as required.

Skill Set:

- Microsoft ADS (User setup / Troubleshooting)
- Microsoft Exchange Server (Troubleshooting)
- Software Deployment (Client Roll out, System Management Server (SMS))
- Domain Administration (Preparation)

Duet Expert

A resource on the project with experience implementing Duet will make the implementation efficient and effective. Microsoft and SAP Professional Services organizations as well as Partners have Duet implementation experience from the early stages of the product. If a Duet resource is not internally available, a Microsoft or SAP Duet Expert or an experienced partner should be considered.

Duration:

Full time through Realization, Final Preparation and Go-live phases.

Skill Set: Expert with Duet implementations and scenarios. Recommend having Netweaver expertise.

4 Project Team Effort Estimates

The following Team Effort Estimates will give you a general overview of the amount of time each team member will need to dedicate to the Duet project. These estimates start at the Realization phase when Duet is installed. They do not include the task timelines that customers must set for the Planning and Preparation phases of their project.

Estimates are based on assumptions from Section 2 (starting the Realization phase).

Team member	Estimated % Time Commitment for Assigned Tasks	Estimated % Time Availability
Project Management	20%	100%
* Duet Expert	100%	100%
Netweaver Expert (ABAP)	25%	50%
Netweaver Expert (JAVA)	25%	100%
Software Deployment Expert	10%	20%
Exchange/ADS Expert or Security Expert	10%	20%
Business Expert	30%	50%

* Not included in the estimates is shadowing of an assigned Duet Expert from the Customer (if the Duet Expert is from SAP, Microsoft or a partner) for knowledge transfer.

5 Project Phases, Tasks and Team Assignments

The following sections describe what tasks are required in each phase and which team members need to be a part of each task.

Note: In the case of the Planning and Preparation phases, estimates are individual to customers as they will be at different level in their systems, their business requirements will be different and the structure of their organizations will also be different. Therefore, for the Planning and Preparation phases, the customers must estimate their own efforts.

5.1 Planning

PLANNING				
Task Number	Task Description	Steps	Team Members	Estimates to be provided by customer
1	Scoping			
		Analysis of Business Benefits	Business Expert Business Community Project Manager (Customer)	
		Duet Scenarios to be implemented as well as what functionality will be used. For Example: For the Reports and Analytics Scenario, list which reports will be part of Duet including parameters, authorizations required and which groups should have access to which reports	Business Expert Business Community Project Manager (Customer)	
		Decision on which user groups will be part of the Duet roll-out. Recommend starting with small control group for initial phase and then roll out to larger groups.	Business Expert Business Community Project Manager (Customer)	
2	Team Setup			
		Task Assignment	Project Manager (Customer & SAP)	
		Availability Timeline	Project Manager (Customer & SAP)	
3	Launch Project			
		Project Kick Off Meeting	Implementation Team	
4	Duet Landscape – Hardware and Software ⁽¹⁾			

PLANNING				
Task Number	Task Description	Steps	Team Members	Estimates to be provided by customer
		Current systems gap analysis with respect to software and hardware pre-requisite requirements	Netweaver(JAVA) Netweaver(ABAP) Microsoft Expert	
		Order New Hardware and Software if required	Project Manager (Customer) Netweaver(JAVA) Netweaver(ABAP) Microsoft Expert	
5	SAP Backend Functional Assessment			
		Validation of SAP Backend system readiness and analysis of configuration of current SAP Application System(s) related to the Duet Scenario. Is functionality available independent of Duet?	Business Expert	
6	Planning for Operations Concept			
		Who will own Duet?	Project Manager (Customer) with IT community and Project Sponsor	
		Can Duet monitoring and support procedures be integrated into current procedures? Outline plan. For instance, use SMD, CCMS	Project Manager (Customer) with IT community	
		Operation Concept Discussions: 1) Who will support Duet 2) Service Level Agreements	Project Manager (Customer) with IT community	
7	Timelines			
		Finalize go-live dates and project timelines	Project Manager(Customer) Project Manager(SAP)	

⁽¹⁾ For the planning of the Duet landscape, refer to the Installation Guide in the Appendix 2 – Overview of Available Documentation for hardware and software pre-requisites and sizing.

5.2 Preparation and Blueprinting

PREPARATION AND BLUEPRINTING				
Task Number	Task Description	Steps	Team Members	*Estimates to be provided by customer
1	Service User / Test User Setup			
		Review/ Create Service & Test Users where required – see Appendix 3 - Duet Implementation Worksheet for detailed requirements	Netweaver(Java) Netweaver(ABAP) Exchange/ADS Expert	
2	Landscape Preparation for Development Tier			
		SAP Backend system(s) Apply Service Packs to SAP Backend based on Duet 1.5 SP1 Release Information Note to DEV and QA SAP Backend System	Netweaver(ABAP)	
		SAP Backend System(s) Apply OSS Notes related to the scenarios to be implemented and those required for general Duet based on Duet 1.5 SP1 Release Information Note. Transport to QA SAP Backend System.	Netweaver(ABAP)	
		SAP Backend System(s) Regression Testing of QA SAP Backend System. <ul style="list-style-type: none">- Test for impact from Service Pack and Notes application before transport to PROD- Test for Duet scenario functionality required	Business Expert	
		SAP Backend System(s) Authorizations for Duet End-Users <ol style="list-style-type: none">1) Must have authorization for SAP Application related to Duet2) Add extra Duet authorizations required for general Duet or Duet scenario (see Duet Security Guide and related Duet scenario configuration guide in the Appendix 2 – Overview of Available Documentation for list) Transport authorizations to SAP QA Backend System	Netweaver(ABAP) or Security	
		⁽¹⁾ Duet Server Preparation	Netweaver(Java)	

PREPARATION AND BLUEPRINTING

Task Number	Task Description	Steps	Team Members	*Estimates to be provided by customer
		⁽¹⁾ Client Machines Preparation Upgrade and Patch End User Machines as required based on pre-requisites	Software Deployment (Desktop Expert)	
3	Landscape Preparation for Production Tier			
		⁽¹⁾ Duet Server Preparation	Netweaver(Java)	
		⁽¹⁾ Client Machines Upgrade and Patch End User Machines as required based on pre-requisites	Software Deployment (Desktop Expert)	
		Firewalls Depending on plan for landscape, extra tasks may be required if firewalls exist	Security Expert	
4	Blueprinting			
		Document Duet Landscape, service users and scenario authorizations roles using the Appendix 3 - Duet Implementation Worksheet (or your own template)	Netweaver(Java) Netweaver(ABAP)	
		Document Duet Business Processes, Test Scripts and keep track of test users	Business Expert	
		Start documentation of your Operations Concept	Project Manager Customer IT group(s)	
5	Other Tasks specific for Reporting			
		If Duet BI Workbooks will be used for Duet, setup a pre-calculation server in the QA and the Production environment	Netweaver(ABAP)	
		If Duet Reports will be delivered in PDF format, then configuration requirements for Bex Web must be completed. This is required for Adobe document support.	Netweaver(JAVA)	

⁽¹⁾ For the preparation of the Duet landscape components, refer to the Installation Guide in the Appendix 2 – Overview of Available Documentation for hardware and software pre-requisites. The Duet Installation Guide gives a thorough overview as well as the Duet Release Note.

5.3 Realization

REALIZATION OF THE DEVELOPMENT TIER				
Task Number	Task Description	Steps	Team Members	Estimates
1	Mass Roll Out Script			8 hours – depends on requirements
		<p>Microsoft provides Sample Deployment Script (coming soon)</p> <p>Adjust the MS Sample VB Script to your environment or develop your own method of mass deployment.</p> <p>At time of writing of this implementation guide, the sample deployment script was not yet published by Microsoft, but will be available shortly.</p> <p>Please look for Duet blogs on SDN (https://www.sdn.sap.com/irj/sdn/duet) where we will announce the sample script as soon as it becomes available as well as blog giving recommendations on the mass roll out script</p>	Software Deployment Expert	
2	Preparing the Host for Duet Components			1 hour
		Configuring Gateway (if required) and Configuring Trust between the Intended SAP Duet Server Host and an SAP System	Netweaver(ABAP) Netweaver(JAVA)	
3	Install Duet Server Components (Microsoft)			4 hours
		Install Duet Metadata Service	Duet Expert	
		Install Duet Request Handler	Duet Expert	
		Configure Request Handler Web Service	Duet Expert	
		Configure Metadata Service Security Settings	Duet Expert	
		Configure AzMan and Service Provider Authentication using IIS	Duet Expert	
4	Setting Up SAP Duet Components			8 hours
		Deploying SAP Duet Components	Duet Expert	
		Configuring Authentication for Use in Duet	Duet Expert	

REALIZATION OF THE DEVELOPMENT TIER

Task Number	Task Description	Steps	Team Members	*Estimates
		Configure User Management Engine to connect to Active Directory Service	Duet Expert	
		Configuring the SAP Duet Components	Duet Expert	
		Deploying Duet Business Applications (SAP)	Duet Expert	
		Configuring a Duet Business Application (SAP)	Duet Expert	
		Copying User and Content Group Assignments to Authorization Manager	Duet Expert	
5	Configure Duet Scenario in the SAP Backend System(s)			4-8 hours depending on # of reports
		Steps depend on the scenario. See related Duet Scenario Configuration guide for details.	Duet Expert	
		Transport Configuration to SAP QA Backend Server	Netweaver(ABAP)	
		Update RFC's in QA if RFC configuration is required for scenario	Duet Expert	
6	Validation Checks – the more time spent in validation will prevent issues at go live			Customer to estimate based on their landscape (Recommend at least 4 – 8+ hours)
		Perform Validation Checks based on Duet Installation Guide checklists	Duet Expert	
7	Installing Duet Client Components			12 hours
		Configure global Group Policy settings either locally as part of the mass roll out script or at domain level	Exchange/ADS Expert or Software Deployment Expert	
		Duet Client Deployment using Mass Roll Out Script as test	Software Deployment Expert	
		Duet Scenario Unit Test	Duet Expert	
8	Scenario Integration and Acceptance Testing			1 week
		Test Scenario(s) using Test Scripts	Business Expert and Business End-Users	

REALIZATION OF THE DEVELOPMENT TIER

Task Number	Task Description	Steps	Team Members	Estimates
		Log Issues for resolution	Business Expert	
		Issue Resolution	Duet Expert	

REALIZATION OF THE PRODUCTION TIER

Task Number	Task Description	Steps	Team Members	Estimates
1	Preparing the Host for Duet Components			1 hour
		Configuring Gateway (if required) and Configuring Trust between the Intended SAP Duet Server Host and an SAP System	Netweaver(ABAP) Netweaver(JAVA)	
2	Install Duet Server Components (Microsoft)			4 hours
		Install Duet Metadata Service	Duet Expert	
		Install Duet Request Handler	Duet Expert	
		Configure Request Handler Web Service	Duet Expert	
		Configure Metadata Service Security Settings	Duet Expert	
		Configure AzMan and Service Provider Authentication using IIS	Duet Expert	
3	Setting Up SAP Duet Components on the Duet Server			8 hours
		Deploying SAP Duet Components	Duet Expert	
		Configuring Authentication for Use in Duet	Duet Expert	
		Configure User Management Engine to connect to Active Directory Service	Duet Expert	
		Configuring the SAP Duet Components	Duet Expert	
		Deploying Duet Business Applications (SAP)	Duet Expert	
		Configuring a Duet Business Application (SAP)	Duet Expert	
		Copying User and Content Group Assignments to Authorization Manager	Duet Expert	
		User Interface configuration (import from DEV tier landscape)	Duet Expert	

5.4 Final Preparations (Production Cut-over)

FINAL PREPARATIONS (PRODUCTION CUT-OVER)				
Task Number	Task Description	Steps	Team Members	Estimates
1	Support Package Application			Customer to estimate
		SAP Backend System(s) Apply Support Packages to Production	Netweaver(ABAP)	
2	Transports from QA			Customer to estimate
		SAP Backend System(s) Transport OSS Notes to Production	Netweaver(ABAP)	
		SAP Backend System(s) Transport Scenario Configuration from SAP QA Backend System	Netweaver(ABAP)	
3	Manual Configuration in Production			1 hour
		Update RFC's in production if RFC configuration is required for scenario	Duet Expert	
4	Validation Checks on Production Tier			Customer to estimate
		Perform Validation Checks based on Duet Installation Guide checklists	Duet Expert	
6	Installing Duet Client Components (small control group)			4 hours
		Apply Group Policy at Domain level or as part of script	Duet Expert	
		Duet client Deployment using script (small control group)	Duet Expert	
7	Duet Unit Tests on Control Group			4 – 8 hours
		Using Duet Test Scripts, do unit tests on control group	Business Expert and Control Group	
		Duet Client Deployment using Mass Roll Out Script as test	Software Deployment Expert	
		Duet Scenario Unit Test	Duet Expert	
8	Installing Duet Client Components (mass roll out)			8 hours

FINAL PREPARATIONS (PRODUCTION CUT-OVER)

Task Number	Task Description	Steps	Team Members	Estimates
		Apply Group Policy at Domain level or as part of script	Duet Expert	
		Duet client Deployment using script (small control group)	Duet Expert	
9	Review by SAP Active Global Support			8 hours
		SAP Active Global support will ensure system readiness before go-live of Duet		
10	Training (Not included in sample estimates)			Customer to Estimate
		Duet End-Users Training		
		Duet Administration, help line, and troubleshooting training	Duet Expert	
11	Implement and complete documentation for your company's Operations Concept which includes Duet landscape Monitoring and Issue Resolution Procedures			Customer to Estimate
		Set up Monitoring Tools as required		
		Implement Landscape Monitoring and Issue Resolution Procedures based on Customer Operations concept	Project Manager Company IT Group(s) Duet Expert	

5.5 Go-live and Support

GO-LIVE AND SUPPORT				
Task Number	Task Description	Steps	Team Members	Estimates
1	Provide On-site Support			2 weeks
		On-site Support	Duet Expert	
2	Document and Resolve Technical or Business Issues			Customer to estimate
		Keep track of issues using an issue log or report so status of go-live can be reviewed by project management.	Duet Expert and required actions from Implementation Team	
3	Handover Support and System Administration to Customer Operations Team if Duet Expert is outside resource			Customer to estimate
		Customer Team take over of support and system administration	Duet Expert and Operations Team	
4	Project Closing			Customer to estimate
		Project Closing Meeting and Project Review	Implementation Team	

6 Appendix 1 - Important SAP Notes

You must read the following SAP Notes before you start installation and configuring Duet. These notes are also helpful in operational considerations./ These SAP Notes contain the most recent information on the configuration and use of Duet, as well as corrections to the documentation.



Make sure that you have the up-to-date version of each SAP Note, which you can find on SAP Service Marketplace at <https://service.sap.com/notes>.

SAP Note Number	Title	Comment
1149693	Duet 1.5 SP1 Release Information Note	Contains relevant information available after the release of Duet version 1.5 SP1

7 Appendix 2 - Overview of Available Documentation



Documentation related to Duet is available at the Duet Documentation Center on SAP Service Marketplace at <http://service.sap.com/swdc> unless otherwise specified in the table.

Structure of the Documentation	Explanation
Master Guide	This guide provides an introductory point of entry to the Microsoft and SAP documentation set as well as a roadmap for using all of the Duet documentation.
Installation Guide	<p>Deploy Duet components using the Duet for Microsoft and SAP: Installation Guide</p> <p>This is a single guide jointly produced by Microsoft and SAP. It provides information for installing all the Duet components from both Microsoft and SAP.</p> <p>We recommend that you use the appropriate section to install and deploy Duet components, accordingly.</p>
ERP Configuration Guide	<p>This guide documents configuration, maintenance, and administration of the following business applications in the SAP ERP system:</p> <ul style="list-style-type: none"> • Workflow Patterns for use with Travel Request and Travel Expense Approval business applications • Leave Management • Team management • Budget monitoring • Reporting Management • Time Management • E-Recruitment <p>Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP ERP</p>
CRM Configuration Guide	<p>The SAP CRM Configuration Guide describes document maintenance and administration of the Duet business applications for the SAP CRM system.</p> <p>Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP CRM system.</p>
SAP SCM Configuration Guide	<p>The SAP SCM Configuration Guide describes document maintenance and administration of the Duet business applications for SAP SCM system.</p> <p>Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP SCM system.</p>

Structure of the Documentation	Explanation
SAP SRM Configuration Guide	The SAP SRM Configuration Guide describes document maintenance and administration of the Duet business applications for the SAP SRM system. Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP SRM system.
SAP Administration Guide	The Administration Guide describes document maintenance and administration of the environments in which you run Duet components from SAP. Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP system.
SAP Operations Guide	The Operations Guide is the starting point for configuration and maintenance tasks in the Duet landscape in which Duet components from SAP run. The guide refers users to the tools and documentation that are needed to carry out various tasks, such as, landscape implementation, monitoring, backup and restore, clustering and availability, and tests. It also refers users to more detailed documentation in the SAP Library. Target group: Solution consultants, project teams for implementations, system administrators, and the administrators of the SAP system.
Security Guide	The Security Guide provides security-relevant information that applies to user administration and authentication in Duet.
Upgrade Guide	This document describes how to perform patch installation of support and enhancement packages for Duet version 1.5 and how to upgrade Duet version 1.0 components to Duet version 1.5. This is a single guide jointly produced by Microsoft and SAP. It provides information for upgrading and performing patch installation of all the Duet components from both Microsoft and SAP. We recommend that you use the appropriate section to upgrade the Duet components accordingly
Microsoft Planning Guide	This document provides an architectural and conceptual overview of the Duet server and client components provided by Microsoft, and helps plan for their installation. (<i>Duet_MicrosoftPlanningGuide.doc</i>)
Microsoft Administration Guide	This document contains instructions for managing the Duet server and client components provided by Microsoft after the initial deployment. It also includes reference information for the command-line tools. (<i>Duet_MicrosoftAdminGuide.doc</i>) You can find the Duet Microsoft Administration Guide at https://connect.microsoft.com/default.aspx
Microsoft Readme File	This readme provides important information not contained in the documentation, as well as descriptions of known issues.

Structure of the Documentation	Explanation
Microsoft Glossary	<p>This glossary is an online version hosted on SharePoint site. It provides a glossary of technical terms.</p> <p>You can find the Duet Microsoft Glossary at https://connect.microsoft.com/default.aspx</p>
Duet How To Guides and Blogs	<p>How to Guides and Blogs for Duet can be found on the Service Marketplace:</p> <ul style="list-style-type: none"> ▪ Duet How To Guides https://www.sdn.sap.com/irj/sdn/advancedsearch?query=Duet+how+to&cat=sdn_all ▪ Duet Blogs https://www.sdn.sap.com/irj/sdn/advancedsearch?query=Duet+blog&cat=sdn_all

8 Appendix 3 – The Duet Implementation Worksheet

8.1 About This Worksheet

This worksheet is intended for use by a customer or Duet implementation Team to document critical information and operation requirements for Duet installation and maintenance. It is recommended to fill out this spreadsheet before the start of the Duet Implementation as it can be used to highlight any pre-requisites that may not be in place.

This worksheet does not cover a multiple forest or domain installation or an installation using citrix.



Passwords used for the service users should not be documented in this worksheet. It is recommended to use a password tracking software to be accessed by critical personnel only. Changes of passwords will influence the Duet installation therefore if passwords are changed, Duet configuration using the corresponding users must also be changed.

8.2 Duet Implementation Project Phases

Enter the phases of the implementation project planned based on the planning phase decisions.

PROJECT/PHASE IDENTIFICATION	
Project Name & Type (Duet Implementation, Upgrade, New Scenario, New user rollout, other)	
Duet Scenarios	Planned Start/Finish
User Group Roll Out	Planned Start/Finish

8.3 Duet Implementation Project Team Members




PROJECT TEAM MEMBERS - <PROJECT NAME AND PHASE>	
Team Member	Information
Project Sponsor	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Project Manager (Customer)	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Project Manager (SAP)	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Duet Expert	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Netweaver Expert (JAVA)	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Netweaver Expert(ABAP)	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Business Expert	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Exchange/ADS Expert	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:




PROJECT TEAM MEMBERS - <PROJECT NAME AND PHASE>

Team Member	Information
Security Expert	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Software Deployment/Desktop Expert	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:
Duet Tester	Name: _____ Position: _____
	Company :
	E-mail Address:
	Contact #:




8.4 Duet Service Users for Duet Installation and Operations




Administration User ids for Duet Implementation

User Function	Administrator User for software installation on the Duet server. This includes the installation of MS SQL Server database, SAP Netweaver and the Duet software.	
Enter Actual User ID		
Example User ID	Use existing administration id or create as required	
Service User Properties	Required	Details
Active Directory Service		Member of: Domain User with Read-only rights to the ADS Mailbox: Not Required Account Options: Follow Current Company Policies
SAP Backend System User		
J2EE Administrator		
Extra Requirements	<ul style="list-style-type: none"> - This user should be a local administrator on the server. [AP: To avoid confusion between OS user and J2EE user] - Has to be an ADS user (required for MSFT component installation) - Alternatively you can use <SID>adm if it exists in the ADS 	




User Function	J2EE Administrator User for deploying SAP Duet components using the Java Support Package Manager (JSPM).	
Enter Actual User ID		
Example User ID	<SID>adm Where <SID> is the system ID of the Duet Server Java J2EE. Note: The <SID>adm user is created automatically during the installation of the SAP NetWeaver (Application Server Java).	
Service User Properties	Required	Details
Active Directory Service	 (optional)	ADS user or alternatively local OS user (with administrator privileges)
SAP Backend System User		
J2EE Administrator		

Administration User ids for Duet Implementation - Continued




User Function	J2EE Administrator User	
Enter Actual User ID		
Example User ID	Administrator Note: The “Administrator” user is created automatically during the installation of the SAP NetWeaver (Application Server Java).	
Service User Properties	Required	Details
Active Directory Service		
SAP Backend System User		
J2EE Administrator		

User Function	SAP Backend Customizing User ID (required for each backend) for customizing Duet Business Application and scheduling of jobs	
Enter Actual User ID		
Example User ID	Use Business Expert(s) id for each backend or create as required	
Service User Properties	Required	Details
Active Directory Service	 (Optional)	Member of: Domain User with Read-only rights to the ADS Mailbox: Not Required Account Options: Follow Current Company Policies
SAP Backend System User		Required for each SAP Backend System - See Security Guide for required Administration Rights This user is a dialog user.
J2EE Administrator		
Extra Requirements	An administrator user should be the administrator for the ERP system and the SAP Add-On. This user should be able to execute the web services/processes in the SAP Add-On If this user will be used for scheduling of jobs, then the user must exist on the ADS.	




Service User ids for Duet Implementation and Configuration




User Function	Service User required for system connection to SAP backend system(s) – Required for each SAP Backend System	
Enter Actual User ID		
Example User ID	Duet<SID><client> Where <SID> and <Client> are the system ID and client number of the SAP backend system, respectively	
Service User Properties	Required	Details
Active Directory Service		
SAP Backend System User		Required for each SAP Backend System - See Security Guide for required Administration Rights Recommendation for Production: This should be a <i>system</i> user This service user must have basic authorizations to execute RFCs in the SAP system (S_RFC)
J2EE Administrator		
Extra Requirements	If Service User passwords change or if attributes change, Duet may stop working. If changes are done to passwords, corresponding service needs to be reconfigured/re-installed.	

Service User ids for Duet Implementation and Configuration – continued



User Function	Service User for the Request Handler Designated Account	
Enter Actual User ID		
Example User ID	DuetAgent<SID> Where <SID> is the system ID of the Duet Server Java J2EE.	
Service User Properties	Required	Details
Active Directory Service		Member of: Domain User with Read-only rights to the ADS Mailbox: Required Account Options: User cannot change password/Password Never expires (recommended)
SAP Backend System User		
J2EE Administrator		
Extra Requirements	<ul style="list-style-type: none"> - Before installing the Duet Request Handler, log onto the mailbox of this user using the Outlook Web Access URL to initialize the mailbox - If user password expires then Duet Request Handler has to be reinstalled/reconfigured 	

Service User ids for Duet Implementation and Configuration – continued

User Function	Kerberos Authentication Service User	
Enter Actual User ID		
Example User ID	J2ee-<SID> Where <SID> is the system ID of the Duet Server Java J2EE.	
Service User Properties	Required	Details
Active Directory Service		Member of: Domain User with Read-only rights to the ADS Mailbox: Not Required Account Options: - User cannot change password/Password Never expires (recommended) - Use DES encryption types for this account
SAP Backend System User		
J2EE Administrator		
Extra Requirements	On the ADS for each Kerberos Realm, register this user with a Service Principal Name (SPN) for every DNS name that can be used to access the AS Java with Kerberos authentication. For information about how to create and register a service user in the Active Directory Service, see the topic, <i>Step 1: Prerequisites</i> , on the SAP Help portal at: http://help.sap.com/saphelp_nw70/helpdata/en/45/40a18e773a7527e1000000a114a6b/frameset.htm	

User Function	IIS Service User for Service Provider Service and AzMan Service	
Enter Actual User ID		
Example User ID	SAPService<SID> Where <SID> is the system ID of the Duet Server Java J2EE. Note: Depending on how the SAP NetWeaver was installed, the SAPService<SID> user will be created either on the ADS (domain installation) or on the local server (local installation).	
Service User Properties	Required	Details
Active Directory Service	 (Optional)	Member of: Domain User with Read-only rights to the ADS Mailbox: Not Required Account Options: Follow Current Company Policies Alternatively user can be local OS User
SAP Backend System User		
J2EE Administrator		

8.5 Duet End Users Setup Requirements

User Function	Duet End User	
Enter Actual User ID		
Example User ID	Various	
Service User Properties	Required	Details
Active Directory Service		Member of: Domain User with Read-only rights to the ADS Mailbox: Required Account Options: Follow Current Company Policies
SAP Backend System User		
User Mapping Requirements	<p>If the Duet end user is assigned to scenarios that require multiple backend systems, their user id must be the same in all SAP Backend Systems.</p> <p>If the user id in the SAP Backend Systems is different than the user id in the ADS than User mapping configuration is required as an extra step.</p>	
SAP Backend Authorization Requirements	<p>Require SAP Backend Authorizations to perform stand-alone functionality related to Duet scenarios. For example, the end user must be able to post entries to CATS if they are using Time Management.</p> <p>See the Duet Security Guide and the related Duet Scenario configuration guide for the extra authorizations required for general Duet functionality and Duet scenario specific functionality.</p>	

8.6 System Details for the Duet Landscape

< Add Diagram of your landscape showing system names and related security settings >

ACTIVE DIRECTORY SERVER (ADS)		
Host of the ADS	Min Requirement for Duet 1.5 SP1	Actual
MS Active Directory Service Release / Service Pack		
Fully Qualified Host Name		
IP Address		
Domain Name		
Service Port (e.g. 389)		
User ID of Administrator		

DOMAIN CONTROLLER (IF DIFFERENT FROM THE ADS)		
Fully Qualified Host Name		
IP Address		
Domain Name		
User ID of Administrator		

MICROSOFT EXCHANGE SERVER (IF DIFFERENT FROM THE ADS)		
Host of the Exchange Server	Min Requirement for Duet 1.5 SP1	Actual
MS Exchange Server Release / Service Pack		
Fully Qualified Host Name		
IP Address		
Domain Name		
Exchange web service TCP port		
Exchange web service SSL port		
Web DAV enabled (Yes/No)		
Form Based Authentication or Windows Authentication		
User ID of Administrator		

DUET SERVER

Host of the Duet Server	Min Requirement for Duet 1.5 SP1	Actual
Operating System: Release / Service Pack, 32-bit or 64-bit?		
Microsoft SQL Server Release / Service Pack		
Microsoft .NET Framework Release		
Fully Qualified Host Name		
IP Address		
Domain Name		
User ID of O/S Administrator		
J2EE Service	Min Requirement for Duet 1.5 SP1	Actual
SAP Netweaver Software Release / Service Pack		
System ID		
Instance Number		
Client		
Message Server Name		
Message Server Port		
HTTP Port (e.g. 50000)		
HTTPS Port (e.g. 50001)		
SDM Port (e.g. 50018)		
P4 Port (e.g. 50004)		
User ID of J2EE Administrator		
Microsoft Internet Information Service (IIS)	Min Requirement for Duet 1.5 SP1	Actual
Software Release		
Request Handler HTTP Port (default web site port)		
Request Handler HTTPS Port (default web site port)		
Duet Service Read Port		
Duet Service Provider Port (Duet write service)		
Duet AzMan Service Port		

SAP BACKEND SYSTEM ERP - HR SCENARIOS AND REPORTING

Component Release Information (Release/Service Pack)	Min Requirement for Duet 1.5 SP1(For details, see Duet 1.5 SP1 Release Note 1149693)	Actual
SAP_BASIS		
SAP_ABA		
SAP_APPL		
SAP_HR		
EA-APPL		
EA-HR		
ECC-SE		
General Information		
Fully Qualified Host Name		
Domain Name		
SID		
Message Server		
Message Server Port		
Instance Number		
IP Address		
Logon Group		
Client		
HTTP Port		
HTTPS Port		
User ID of O/S Administrator		
User ID of SAP Administrator		
Duet Test End –User		
User ID of Duet Test User #1		
User ID of Duet Test User #2		
Duet Scenario	<p>SAP Backend Role representing scenario (assign to all associated scenario users in the SAP Backend System using transaction SU01)</p> <p>For different levels of Reporting, can create custom roles to differentiate who should receive which reports. List all roles used.</p>	
Time Management		
Leave Management		
Team Management		
Travel Management		
E-Recruitment		
Budget Monitoring		

SAP BACKEND SYSTEM BI – REPORTING

Component Release Information (Release/Service Pack)	Min Requirement for Duet 1.5 SP1 (For details, see Duet 1.5 SP1 Release Note)	Actual
SAP_BASIS		
SAP_ABA		
SAP_BW		
BI_CONT		
General Information		
Fully Qualified Host Name		
Domain Name		
SID		
Message Server		
Message Server Port		
Instance Number		
IP Address		
Logon Group		
Client		
HTTP Port		
HTTPS Port		
User ID of O/S Administrator		
User ID of SAP Administrator		
Duet Test End –User		
User ID of Duet Test User #1		
User ID of Duet Test User #2		
Duet Scenario	<p>SAP Backend Role representing scenario (assign to all associated scenario users in the SAP Backend System using transaction SU01)</p> <p>For different levels of Reporting, can create custom roles to differentiate who should receive which reports. List all roles used.</p>	
Reporting		

SAP BACKEND SYSTEM CRM – SALES MANAGEMENT

Component Release Information (Release/Service Pack)	Min Requirement for Duet 1.5 SP1 (For details, see Duet 1.5 SP1 Release Note 1149693)	Actual
SAP_BASIS		
SAP_ABA		
PI_BASIS		
SAP_BW		
BI_CONT		
SAP CRM		
General Information		
Fully Qualified Host Name		
Domain Name		
SID		
Message Server		
Message Server Port		
Instance Number		
IP Address		
Logon Group		
Client		
HTTP Port		
HTTPS Port		
User ID of O/S Administrator		
User ID of SAP Administrator		
Duet Test End –User		
User ID of Duet Test User #1		
User ID of Duet Test User #2		
Duet Scenario		
	SAP Backend Role representing scenario (assign to all associated scenario users in the SAP Backend System using transaction SU01)	
Sales Management		
Reporting		

SAP BACKEND SYSTEM SCM – DEMAND PLANNING SCENARIO

Component Release Information (Release/Service Pack)	Min Requirement for Duet 1.5 SP1 (For details, see Duet 1.5 Demand Planning 1.5: Prerequisites – Note 1120022)	Actual
SAP_BASIS		
SAP_ABA		
SAP_APPL		
SCMSE		
General Information		
Fully Qualified Host Name		
Domain Name		
SID		
Message Server		
Message Server Port		
Instance Number		
IP Address		
Logon Group		
Client		
HTTP Port		
HTTPS Port		
User ID of O/S Administrator		
User ID of SAP Administrator		
Duet Test End –User		
User ID of Duet Test User #1		
User ID of Duet Test User #2		
Duet Scenario		
	SAP Backend Role representing scenario (assign to all associated scenario users in the SAP Backend System using transaction SU01) For different levels of Reporting, can create custom roles to differentiate who should receive which reports. List all roles used.	
Purchasing Scenario		
Reports and Analytics Scenario		

SAP BACKEND SYSTEM SRM – PURCHASING SCENARIO

Component Release Information (Release/Service Pack)	Min Requirement for Duet 1.5 SP1 (For details, see Duet 1.5 SP1 Release Note 1149693)	Actual
SAP_BASIS		
SAP_ABA		
SRM_SERVER		
General Information		
Fully Qualified Host Name		
Domain Name		
SID		
Message Server		
Message Server Port		
Instance Number		
IP Address		
Logon Group		
Client		
HTTP Port		
HTTPS Port		
User ID of O/S Administrator		
User ID of SAP Administrator		
Duet Test End –User		
User ID of Duet Test User #1		
User ID of Duet Test User #2		
Duet Scenario	<p>SAP Backend Role representing scenario (assign to all associated scenario users in the SAP Backend System using transaction SU01)</p> <p>For different levels of Reporting, can create custom roles to differentiate who should receive which reports. List all roles used.</p>	
Purchasing Management Scenario		
Reports and Analytics Scenario		

DUET END-USER CLIENT MACHINES (TEST USER BUT INFORMATION VALID FOR ALL USERS)		
Software	Min Requirement for Duet 1.5 SP1 (For details, see Duet 1.5 SP1 Release Note)	Actual
MS Windows Operating System Release / Service Pack, 32-bit or 64-bit?		
MS Office Release / Service Pack		
List of all Microsoft Outlook Add-ins		
Duet Test Client #1		
Fully Qualified Host Name		
IP Address		
Domain Name		
User ID of Test User #1		
Duet Test Client #2		
Fully Qualified Host Name		
IP Address		
Domain Name		
User ID of Test User #2		

9 Appendix 4 – Sample Project Plans

Sample Timelines in MS Projects format are available for Proof of Delivery projects and Production projects.

The project plans contain sample tasks for a Duet project where a customer can apply estimates.

The same assumptions shown in Section 2 of this Implementation kit apply to the Project Plans.

These are only samples as customers will have to customize the plan based on their project requirements.