



MASTER GUIDE | CUSTOMER

User Interface Add-On 2.0 for SAP NetWeaver

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Master Guide for UI Add-On

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1 Master Guide

Use

About This Document

This Master Guide is the central starting point for the technical implementation of [user interface add-on 2.0 for SAP NetWeaver](#). It contains cross-scenario implementation information as well as scenario-specific information.

Use the Master Guide to get an overview of [UI add-on 2.0 for SAP NetWeaver](#), its software units, and its scenarios from a technical perspective. The Master Guide is a planning tool that helps you to design your system landscape. It refers you to the required detailed documentation, mainly:

- Installation guides for single software units
- SAP Notes
- Configuration documentation
- SAP Library documentation

Constraints

The business scenarios that are presented here are examples of how you can use SAP software in your company. The business scenarios are only intended as models and do not necessarily run as described here in your customer-specific system landscape. Be sure to check your requirements and systems to determine whether these scenarios can be used productively at your site. Furthermore, we recommend that you test these scenarios thoroughly in your test systems to ensure they are complete and free of errors before going live.

This Master Guide primarily discusses the overall technical implementation of [UI add-on 2.0 for SAP NetWeaver](#), rather than its subordinate components. This means that additional software dependencies might exist that are not mentioned explicitly in this document. You can find more information on component-specific software dependencies in the corresponding installation guides.

2 Related Information

For more information about topics not covered in this guide, see the following content:

Title	Location
SAP NetWeaver Library	http://help.sap.com/netweaver ► <i>SAP NetWeaver Platform</i> ►
SAP Gateway documentation	http://help.sap.com/netweaver ► <i>SAP NetWeaver Gateway</i> ►
SAP Web Dispatcher documentation	http://help.sap.com/nw_platform Select a release. Under <i>Application Help</i> , open <i>Function-Oriented View</i> and choose ► <i>Application Server</i> ► <i>Application Server Infrastructure</i> ► <i>SAP Web Dispatcher</i> ►.
SAP Visual Business documentation	SAP Visual Business 2.1: http://help.sap.com/visualbusiness21 UI add-on for SAP NetWeaver includes the SAP Visual Business 2.1 back end and the HTML5 version of the SAP Visual Business client as SAPUI5 Library.
Product Availability Matrix	http://service.sap.com/pam 📄

Important SAP Notes

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

General SAP Notes

SAP Note Number	Title	Description
SAP Note 2196503 📄	UI Add-On 2.0 for SAP NetWeaver: Central Note	This central SAP note refers to other SAP notes that contain important information about the user interface add-on for SAP NetWeaver.

SAP Note Number	Title	Description
SAP Note 2194374 	Installing UI Add-On 2.0 for SAP NetWeaver	Describes the installation of the components of UI add-on 2.0 for SAP NetWeaver.
SAP Note 2210122 	Support Packages for UI Add-On 2.0 for SAP NetWeaver	Contains information about add-on support packages for UI add-on for SAP NetWeaver.
SAP Note 2211011 	Recommendation to installing the most recent SP available	It is important that you install the most recent support package stack available for the UI add-on for SAP NetWeaver.
SAP Note 2210123 	Release Strategy for UI Add-On 2.0 for SAP NetWeaver	Contains information about the release strategy for UI add-on for SAP NetWeaver. Read this note if you plan to install or upgrade UI add-on for SAP NetWeaver.
SAP Note 2217489 	Maintenance and Update Strategy for UI Add-On and User Interface Technology	Contains information about the innovation and maintenance versions of UI add-on and SAP_UI component.
SAP Note 2211016 	UI add-on 2.0 for SAP NetWeaver: SPS mapping to UI5, UI2 and SAP_UI 750	This note explains which versions of SAPUI5 and UI2 JavaScript content are relevant for a particular support package stack for UI add-on 2.0 for SAP NetWeaver and which support package of the SAP_UI component corresponds to this.
SAP Note 1760422 	HTML5 applications using WebServices via Gateway as a hub	Contains important information regarding the setup of the system landscape.
SAP Note 1984739 	How to change the Fiori logout page	This note explains how to define a customer specific logout page.
SAP Note 1582870 	ABAP XSS Escaping Support	It is important that you apply this SAP Note to protect your system against cross-site scripting attacks.

SAP Notes for UI Add-On Support Packages

SAP Note Number	Title
SAP Note 2196478 	Release Info Note for SAP NetWeaver UI Add-On 2.0 SP00
SAP Note 2226284 	Corrections for UI add-on 2.0 for SAP NetWeaver SP00
SAP Note 2204647 	Release Info Note for SAP NetWeaver UI Add-On 2.0 SP01

SAP Note Number	Title
SAP Note 2226285 	Corrections for UI add-on 2.0 for SAP NetWeaver SP01
SAP Note 2248621 	Release Info Note for SAP NetWeaver UI Add-On 2.0 SP02
SAP Note 2216882 	Corrections for UI add-on 2.0 for SAP NetWeaver SP02
SAP Note 2292528 	Release Info Note for SAP NetWeaver UI Add-On 2.0 SP03
SAP Note 2255459 	Corrections for UI add-on 2.0 for SAP NetWeaver SP03
SAP Note 2292559 	Release Info Note for SAP NetWeaver UI Add-On 2.0 SP04
SAP Note 2275841 	Corrections for UI add-on 2.0 for SAP NetWeaver SP04

3 Software Units

Software Components

User interface add-on for SAP NetWeaver includes the following software components:

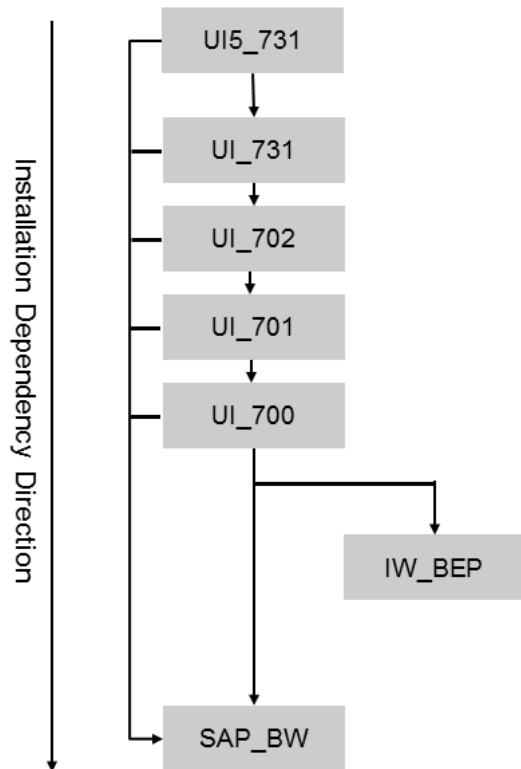
Type	Software Component	Version	Description	Available in UI add-on for SAP NetWeaver Release
ABAP	IW_BEP	200	Backend Event Provider 2.0	SAP NetWeaver 7.0
				SAP NetWeaver 7.0 EHP1
				SAP NetWeaver 7.0 EHP2
				SAP NetWeaver 7.0 EHP3
				SAP NetWeaver 7.3 EHP1
	UI_700	200	SAP UI Implementation for Decoupled Innovations: NW 7.00 Implementation V2.00	SAP NetWeaver 7.0
				SAP NetWeaver 7.0 EHP1
				SAP NetWeaver 7.0 EHP2
				SAP NetWeaver 7.0 EHP3
	UI_701	200	UI Implementation for Decoupled Innovations : NW 7.01 Implementation V2.00	SAP NetWeaver 7.3 EHP1
				SAP NetWeaver 7.0 EHP1
				SAP NetWeaver 7.0 EHP2
				SAP NetWeaver 7.0 EHP3

Type	Software Component	Version	Description	Available in UI add-on for SAP NetWeaver Release
	UI_702	200	SAP UI Implementa- tion for Decoupled In- novations: NW 7.02 Im- plementation V2.00	SAP NetWeaver 7.0 EHP2 SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1
	UI_731	200	SAP UI Implementa- tion for Decoupled In- novations: NW 7.31 Im- plementation V2.00	SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1
	UI5_731	200	UI development toolkit for HTML5: Team Pro- vider Backend 2.0	SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1
	Frontend	5.0	SAP NetWeaver Busi- ness Client 5.0	SAP NetWeaver 7.0 SAP NetWeaver 7.0 EHP1 SAP NetWeaver 7.0 EHP2 SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1
	NWBC 6.0	6.0	SAP Business Client 6.0	SAP NetWeaver 7.0 SAP NetWeaver 7.0 EHP1 SAP NetWeaver 7.0 EHP2 SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1

Type	Software Component	Version	Description	Available in UI add-on for SAP NetWeaver Release
Java IDE	SAPUI5_TOOLS	200	SAPUI5 Tools Eclipse Plugin 2.0	SAP NetWeaver 7.0 SAP NetWeaver 7.0 EHP1 SAP NetWeaver 7.0 EHP2 SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1
	SAPUI5_TEAM_PROVIDER	200	SAPUI5 Team Provider Plugin for Eclipse IDE (Integrated Development Environment)	SAP NetWeaver 7.0 EHP3 SAP NetWeaver 7.3 EHP1

Dependencies between Software Components

The following figure shows the dependencies between software components:



UI5_731 requires UI_731 and SAP_BW.

The higher UI_7xx components require the lower UI_7xx components and SAP_BW.

UI_700 requires IW_BEP and SAP_BW.

SAP_BW requires PI_BASIS.

IW_BEP and PI_BASIS require SAP_ABA.

SAP_ABA requires SAP_BASIS.

Product Instances

In the different versions of *UI add-on for SAP NetWeaver*, the software components described above are bundled in the following product instances:

Type	Product Instance	Comprised Software Component Versions
ABAP	<i>SAP UI Add-on V2.0 for NW7.00</i>	IW_BEP 200
		UI_700 200
	<i>SAP UI Add-on V2.0 for NW7.01</i>	IW_BEP 200
		UI_700 200
		UI_701 200
	<i>SAP UI Add-on V2.0 for NW7.02</i>	IW_BEP 200
		UI_700 200
		UI_701 200
		UI_702 200
	<i>SAP UI Add-on V2.0 for NW7.31</i>	IW_BEP 200
		UI_700 200
		UI_701 200
		UI_702 200
		UI_731 200
	<i>SAPUI5 Dev. TK V2.0 for NW 7.31</i>	IW_BEP 200
		UI_700 200
		UI_701 200
		UI_702 200
		UI_731 200
		UI5_731 200
Frontend	<i>Frontend</i>	NWBC 5.0
Java IDE	<i>SAPUI5 Dev. TK V2.0 IDE Plugins</i>	SAPUI5_TOOLS 200
		SAPUI5_TEAM_PPROVIDER 200

4 Software Component Matrix

Use

The following table shows which scenarios are supported in the different versions of *user interface add-on for SAP NetWeaver* :

Scenario	Product Versions			
	X = supported (X) = supported partly - = not supported			
	UI add-on for SAP NetWeaver 7.0	UI add-on for SAP NetWeaver 7.0 EHP1	UI add-on for SAP NetWeaver 7.0 EHP2	UI add-on for SAP NetWeaver 7.0 EHP3/7.31
Installation of SAP NWBC 5.0 desktop client	X	X	X	X
Developing applications with the UI development toolkit for HTML5 (see the note below)	(X)	(X)	(X)	X
Running applications built with the UI development toolkit for HTML5, where all UI resources are deployed in the SAPUI5 ABAP repository on the same system as the corresponding ABAP application logic	X	X	X	X
Running applications built with the UI development toolkit for HTML5, where all UI resources are deployed in the SAPUI5 ABAP repository on a central system, for example a remote Gateway Server	X	X	X	X

Product Versions

X = supported (X) = supported partly - = not supported

Scenario	UI add-on for SAP NetWeaver 7.0	UI add-on for SAP NetWeaver 7.0 EHP1	UI add-on for SAP NetWeaver 7.0 EHP2	UI add-on for SAP NetWeaver 7.0 EHP3/7.31
Enabling an ABAP system to provide UI-related data via SAP Gateway OData services, for example accessing launchpad links for navigation	X	X	X	X
Enabling an ABAP system to provide UI-related data via SAP Gateway OData services and to run applications based on the UI development toolkit for HTML5	X	X	X	X
Create and deploy custom themes with the UI theme designer	(X)	(X)	X	X
Integrating the social collaboration platform SAP Jam across SAP technologies including ABAP and SAPUI5	-	-	(X)	X

Note

In order to deploy SAPUI5 applications built with the Eclipse-based Tools to an ABAP environment, there are 2 options depending on the SAP NetWeaver release:

- **SAP NetWeaver 7.0 EHP3/7.31:** Direct integration via the SAP Repository Team Provider allows easy and fast deployment. For more information, see the [User Interface Add-on for SAP NetWeaver Developer Guide](#).
- **SAP NetWeaver 7.0, 7.01, 7.02 and 7.03/7.31 < SPS04:** In these releases, it is not possible to directly deploy or upload applications from the local Eclipse installation to the ABAP server. Deployment must take place manually. For more information, see the [User Interface Add-on for SAP NetWeaver Developer Guide](#).

The following table shows which product instances are required for the different scenarios:

Product Instances							
X = mandatory (X) = optional - = not part of scenario							
Scenario	SAP UI Add-on V2.0 for NW7.00	SAP UI Add-on V2.0 for NW7.01	SAP UI Add-on V2.0 for NW7.02	SAP UI Add-on V2.0 for NW7.31	SAPUI5 Dev. TK V2.0 for NW 7.31	Frontend	SAPUI5 Dev.TK V2.0 IDE Plugins
SAP NWBC 4.0 desktop client installation	X	X	X	X	X	X	-
Developing and testing applications with the UI development toolkit for HTML5 on SAP NetWeaver 7.03 or higher	(X)	(X)	(X)	X	X	-	X
Running applications built with the UI development toolkit for HTML5, where all UI resources are deployed in the SAPUI5 ABAP repository on the same system as the corresponding ABAP application logic	X	X	X	X	X	-	-

Product Instances

X = mandatory (X) = optional - = not part of scenario

Scenario	SAP UI Add-on V2.0 for NW7.00	SAP UI Add-on V2.0 for NW7.01	SAP UI Add-on V2.0 for NW7.02	SAP UI Add-on V2.0 for NW7.31	SAPUI5 Dev. TK V2.0 for NW 7.31	Frontend	SAPUI5 Dev.TK V2.0 IDE Plugins
Running applications built with the UI development toolkit for HTML5, where all UI resources are deployed in the SAPUI5 ABAP repository on a central system, for example a remote Gateway Server	X	X	X	X	X	-	-
Enabling an ABAP system to provide UI-related data via SAP Gateway OData services, for example accessing launchpad links for navigation	X	X	X	X	X	-	-

Product Instances

X = mandatory (X) = optional - = not part of scenario

Scenario	SAP UI Add-on V2.0 for NW7.00	SAP UI Add-on V2.0 for NW7.01	SAP UI Add-on V2.0 for NW7.02	SAP UI Add-on V2.0 for NW7.31	SAPUI5 Dev. TK V2.0 for NW 7.31	Frontend	SAPUI5 Dev.TK V2.0 IDE Plugins
Enabling an ABAP system to provide UI-related data via SAP Gateway OData services and to run applications based on the UI development toolkit for HTML5	X	X	X	X	X	-	-
Create and deploy custom themes with the UI theme designer	(X)	(X)	X	X	X	-	-
Integrating the social collaboration platform SAP Jam across SAP technologies including ABAP and SAPUI5	-	-	(X)	X	-	-	-

5 System Landscape

Use

Background: Same Origin Policy

When setting up your system landscape, it is important to have the same origin policy of modern Web browsers in mind.

You install the add-on in one or more ABAP systems. If you are using the back-end services provided by [user interface add-on for SAP NetWeaver](#), you also need an [SAP NetWeaver Gateway](#) system, which provides business data using the OData Channel. In this case, a client needs to communicate with the following agents:

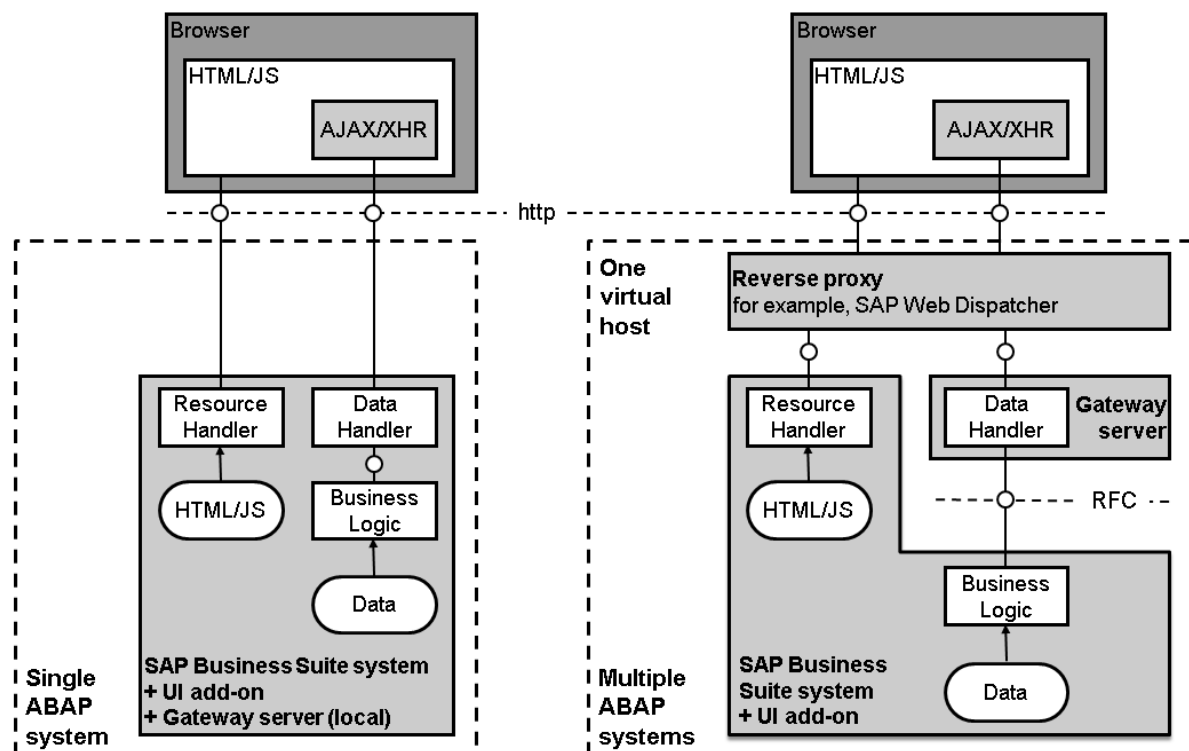
- A resource handler that provides HTML/JavaScript data
- A data handler that provides business data using the OData Channel

For security reasons, modern Web browsers do not allow JavaScript to perform cross-origin calls. A cross-origin call is a call where either the protocol, host name, or port is different from the origin of the HTML page.

Thus, in the system landscape all client requests - OData and UI requests - have to be handled by one server using the same protocol, host, and port.

System Landscape

The following graphic shows two possibilities for designing your system landscape:



The abbreviations in the graphic above have the following meaning:

Abbreviation	Description
AJAX	Asynchronous JavaScript and XML
HTML	HyperText Markup Language
JS	JavaScript
RFC	Remote Function Call
UI	User interface
XHR	XMLHttpRequest

Single ABAP System

If you want to access data from one ABAP system only, you can install SAP Gateway on the same server as your ABAP system. This ensures that user interface data and business data come from the same origin.

Multiple ABAP Systems

If you want to access data from multiple ABAP systems, you need to install and configure a reverse proxy. SAP Web Dispatcher is an example of a reverse proxy. The examples in this documentation assume that SAP Web Dispatcher is used as a proxy.

→ Recommendation

If you want to run applications that have been built with the UI development toolkit for HTML5 and require access to OData services provided by *UI add-on for SAP NetWeaver*, SAP currently recommends that you install and operate a local *SAP NetWeaver Gateway* on the same system as *UI add-on for SAP NetWeaver*.

It is also possible to configure a remote *SAP NetWeaver Gateway* system on a separate server, but you have to carefully consider specific requirements for browser-based scenarios.

i Note

The UI add-on is widely used in SAP Fiori scenarios. For more information on SAP Fiori system landscape, see http://help.sap.com/fiori_bs2013 ► *General Implementation* ► *SAP Fiori for SAP Business Suite: Implementation Information* ► *Setup of SAP Fiori System Landscape for SAP Business Suite* ►.

6 Overall Implementation Sequence

Use

The following table describes the overall installation sequence for the UI add-on for SAP NetWeaver. This table contains all available software units. However, to implement a specific scenario, you only need a subset of available software units. Some are only required for special processes. For information about which software is required to implement a specific scenario, see [Software Component Matrix \[page 12\]](#).

Before you start the implementation, take a decision regarding your system landscape. For more information, see [System Landscape \[page 17\]](#).

Process

Step	Action	Remarks
1	Download the software package Download the documentation package	The software and documentation packages are available in the SAP Software Download Center on SAP Service Marketplace at http://service.sap.com/swdc. Choose Installations and Upgrades A - Z Index N UI ADD-ON FOR SAP NETWEAVER. Select a release and proceed as follows: - To download the software package, choose <i>Installation</i>. - To download the documentation package, choose <i>Application Help (SAP Library)</i>. Note Another way to download the documentation package is from SAP Help Portal at http://help.sap.com/nw-uiaddon under <i>Application Help</i>: - To download the documentation package for the current release, click Material Number. - To download the documentation package for the current release, or for any previous release, click Download Documentation DVD.
2	Install the ABAP add-on on your back-end system	For more information about the installation, see SAP Note 2194374. Among other things, the installer installs the <code>IW_BEP</code> component that is required for communication with the SAP NetWeaver Gateway server.

Step	Action	Remarks
3	Install the <i>SAP NetWeaver Gateway</i> server	SAP recommends to install and operate a local <i>SAP NetWeaver Gateway</i> server on the same system as <i>UI add-on for SAP NetWeaver</i> . The minimum requirement for <i>user interface add-on 2.0 for SAP NetWeaver</i> is <i>SAP NetWeaver Gateway 2.0 Support Package 4</i>. For more information, see http://help.sap.com/netweaver ► <i>SAP NetWeaver Gateway</i> ► <i>Installation Guide</i> ►.
5	Configure OData Channel	Before you perform this step, the add-on (including the <code>IW_BEP</code> component) must be installed on the respective back-end system. In the <i>SAP NetWeaver Gateway</i> system, you configure the connection to one or more back-end systems. This includes defining an RFC destination, setting up a trust relationship and creating a system alias. For more information, see the sections <i>OData Channel</i> and <i>Connection Settings: SAP NetWeaver Gateway to SAP Systems</i> in the SAP Gateway Configuration Guide at ► http://help.sap.com/netweaver ► <i>SAP NetWeaver Gateway</i> ► <i>Configuration Guide</i> ►.

Step	Action	Remarks
6	Install and configure a reverse proxy	This step is only required if the SAP NetWeaver Gateway server runs on a different server than your ABAP back-end system. For more information, see System Landscape [page 17]. In an example configuration SAP uses SAP Web Dispatcher as reverse proxy. However, you can use any other reverse proxy you wish, or possibly use a reverse proxy that you already have installed. For more information on installing SAP Web Dispatcher see Importing the SAP Web Dispatcher in the SAP Web Dispatcher documentation. For more information on the operation of SAP Web Dispatcher see Operating the SAP Web Dispatcher in the SAP Web Dispatcher documentation.
7	Activate OData services	For more information, see http://help.sap.com/nw-uiaddon ► User Interface Add-On 2.0 for SAP NetWeaver ► System Administration and Maintenance Information: Administrator's Guide ► Configuration and Operations ► Activating OData Services ►.
9	Install the Development Toolkit for HTML5 (SAPUI5)	

Step	Action	Remarks
10	Activate the UI5_ICF_HANDLER	You activate the service using <i>Define Services</i> (transaction SICF). For more information, see SAP Help Portal at http://help.sap.com/netweaver ► <i>Application Help</i> ► <i>Function-Oriented View</i> ► <i>Application Server</i> ► <i>Application Server Infrastructure</i> ► <i>Functions and Tools of SAP NetWeaver</i> ► <i>Application Server</i> ► <i>Connectivity</i> ► <i>Components of SAP Communication Technology</i> ► <i>Communication Between ABAP and Non-ABAP Technologies</i> ► <i>Internet Communication Framework</i> ► <i>Development</i> ► <i>Development of Server Side</i> ► <i>Creating and Configuring ICF Services</i> ► <i>Activating and Deactivating ICF Services</i> ►
11	Install the SAP Business Client	On the system that you connect to, the NWBC runtime must be installed. For more information, see SAP Help Portal at http://help.sap.com/nw-uiad-on ► <i>User Interface Add-On 2.0 for SAP NetWeaver</i> ► <i>Application Help: SAP Library</i> ► <i>SAP NetWeaver Business Client</i> ► <i>SAP NetWeaver Business Client Administration Guide</i> ►.

Note

When setting up an RFC destination between the Gateway system and a back-end system, set up a trust relationship between the systems. For more information, see the RFC documentation on SAP Help Portal at <http://help.sap.com/netweaver> ► *SAP NetWeaver Platform* ► *Application Help* ► *SAP NetWeaver Library: Function-Oriented View* ► *Application Server* ► *Application Server Infrastructure* ► *Connectivity* ► *Components of SAP Communication Technology* ► *Classic SAP Technologies (ABAP)* ► *RFC* ► *RFC Administration* ► *Maintaining Remote Destinations* ► *Maintaining Trust Relationships between SAP Systems* ►.

In the configuration of the RFC destination, it is important that you do **not** specify a generic user name and password, but configure the system to use the user name of the user who is currently logged on. For more information, see <http://help.sap.com/netweaver> ► *SAP NetWeaver Gateway* ► *Configuration Guide* ► *OData Channel Configuration* ► *Connection Settings on the SAP NetWeaver Gateway Hub System* ►.

Connection Settings: SAP NetWeaver Gateway to SAP Systems ➤ *Creating a Type 3 RFC Destination on SAP NetWeaver Gateway Host* ➤.

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