

SAP Mobile Platform 3.0 SP08
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Installation: SAP Mobile Platform Server for Windows



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1 Installation: SAP Mobile Platform Server for Windows

Perform SAP Mobile Platform Server installations as needed to implement your SAP Mobile Platform landscape design. Optionally install MBO Runtime components as part of your SAP Mobile Platform system.

Design your SAP Mobile Platform landscape, select an installation scenario, and fill in installation worksheets before installing anything.

For single-server development installations, simply run the SAP Mobile Platform Server SP08 installer on the host system; the installer sets up the internal SAP SQL Anywhere database in the process of installing the server.

For production systems, and all cluster installations, install an external custom database first, then install SAP Mobile Platform Server on a host system and connect to the external database.

For cluster installations, use the same SAP Mobile Platform Server SP08 installer on additional host systems, connecting to the same external database, to add cluster nodes.

Optionally, with any SAP Mobile Platform installation scenario, you can also install MBO Runtime components. For cluster installations, you install the MBO Runtime database (called the data tier) after installing the SAP Mobile Platform external database. For a single-server installation, and installation of individual servers within a cluster, the SAP Mobile Platform Server SP08 installer launches the MBO Runtime Server 3.0 installer on completion of the SAP Mobile Platform SP08 installation.

Note

You can only install one SAP Mobile Platform Server instance per host system.

2 Planning the Landscape

Successfully installing SAP® Mobile Platform for the first time requires a considerable amount of planning, a number of strategic decisions, and many specific pieces of information about the technical environment into which you are installing.

Context

Before you run the installer for the first time, go through the SAP Mobile Platform *Landscape Planning and Design* document and perform the tasks in the procedure below.

Procedure

1. Review the information in *SAP Mobile Platform Landscape Designs* in *Landscape Planning and Design*.
2. Complete the installation worksheet for your chosen landscape design.

Record the environment information you will need during installation. The worksheet is organized in the same order that the installer asks you to provide information. Download the installation worksheets from the SAP Help Portal page for this release. The link is titled, "SAP Mobile Platform 3.0 Installation Worksheets."

i Note

When you install SAP Mobile Platform in a cluster, all nodes must use the same communication port numbers for the same purposes. Make sure that the port numbers you plan to use are available on all nodes before you install SAP Mobile Platform Server on the first node.

3. If you are planning to install MBO Runtime at the same time, complete a separate landscape design for that installation and fill in the installation worksheets. See:
 - SAP Mobile Platform 2.3 SP04 *Landscape Design and Integration*
 - SAP Mobile Platform 2.3 SP06 *Release Bulletin*

Next Steps

[Installing SAP Mobile Platform Server \[page 20\]](#).

3 Installation Task Flows with MBO Runtime Server Components

Roadmap for installing the combination of SAP Mobile Platform and MBO Runtime Server components needed to complete your landscape design.

The documentation contains choice points, where you must decide what to do next, and where to go in the documentation to find the supporting instructions. Find the task flow for your landscape design and use that as a guide.

i Note

If you are installing only SAP Mobile Platform, without MBO Runtime Server components, go directly to [Installing SAP Mobile Platform Server \[page 20\]](#).

3.1 SAP Mobile Platform Single-Server Installation with MBO Runtime Single Server

Install both SAP Mobile Platform and MBO Runtime on a single server as a development environment.

i Note

To avoid JVM issues, install the 32-bit Microsoft Visual C++ 2010 runtime DLLs on your system before you install or upgrade MBO Runtime.

i Note

If you are installing only SAP Mobile Platform, without MBO Runtime Server components, go directly to [Installing SAP Mobile Platform Server \[page 20\]](#).

Table 1:

Component Task	SAP Mobile Platform	MBO Runtime
Database installation	N/A A development installation provides a built-in database.	N/A A single-server installation provides a built-in database.

Component Task	SAP Mobile Platform	MBO Runtime
Server installation	<p>Go to the computer where you want to install a single-server SAP Mobile Platform development system, together with a single-server MBO Runtime system..</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. Acquiring the Installer [page 20] Be sure to acquire all three installers: <ul style="list-style-type: none"> ◦ SAP Mobile Platform 3.0 SP08 ◦ MBO Runtime 3.0 SP06 ◦ MBO Runtime 3.0 SP08 Skip <i>Using an External Database</i>. 2. Preparing for Installation [page 45] 3. Running the Installer [page 46] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installation, select the option to launch the MBO Runtime installer, and enter the path to the MBO Runtime SP06 installer. 4. Verifying the Installation [page 49] <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing MBO Runtime on a Single Server</i> <p>Continue in next row below.</p>
MBO Runtime server upgrade	<p>Stay on the same computer.</p> <p>Perform these tasks:</p> <ol style="list-style-type: none"> 1. Restart the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and moves to the last installer panel. 2. Select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the, same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server > Upgrading MBO Runtime to SP08</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Upgrading a Single-Server Installation</i> <p>Continue in next row below.</p>
Postinstallation	<p>In SAP Mobile Platform 3.0 SP08 <i>Administrator</i>, Continue with:</p> <ul style="list-style-type: none"> • <i>Postinstallation Landscape Setup</i>. <p>Continue in next column.</p>	<p>In SAP Mobile Platform 2.3 SP06 <i>Landscape Design and Integration</i>, Under <i>Stage 3: Implement</i>, continue with:</p> <ul style="list-style-type: none"> • <i>Completing New and Upgrade Installations</i> <p>The installation of your landscape design is complete.</p>

3.2 SAP Mobile Platform Cluster with MBO Runtime Simple Load-Balancing Cluster

Install SAP Mobile Platform in a cluster as a production environment, with MBO Runtime in a simple load balancing-cluster.

Note

To avoid JVM issues, install the 32-bit Microsoft Visual C++ 2010 runtime DLLs on your system before you install or upgrade MBO Runtime.

Note

If you are installing only SAP Mobile Platform, without MBO Runtime Server components, go directly to [Installing SAP Mobile Platform Server \[page 20\]](#).

Table 2:

Component Task	SAP Mobile Platform	MBO Runtime
Database, and server installer	<p>Go to the computer on which you have installed an external database to support the SAP Mobile Platform cluster.</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none">1. Acquiring the Installer [page 20] The server installer image is required, to configure the external database to work with SAP Mobile Platform. Be sure to acquire all three installers:<ul style="list-style-type: none">◦ SAP Mobile Platform 3.0 SP08◦ MBO Runtime 3.0 SP06◦ MBO Runtime 3.0 SP082. Under <i>Using an External Database</i>, follow the instructions for your selected database. <p>Continue in next column.</p>	<p>Go to the computer on which you want to install the MBO Runtime data tier.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server > Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none">• <i>Installing the Data Tier</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
First server node	<p>Go to the computer on which you want to install the first server node in the MBO Runtime cluster.</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. Acquiring the Installer [page 20] Be sure to acquire all three installers: <ul style="list-style-type: none"> ○ SAP Mobile Platform 3.0 SP08 ○ MBO Runtime 3.0 SP06 ○ MBO Runtime 3.0 SP08 <p>Alternatively, you can copy the installer images you acquired when installing the external database.</p> <p>Skip <i>Using an External Database</i>.</p> 2. Preparing for Installation [page 45] 3. Running the Installer [page 46] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. 4. Verifying the Installation [page 49] <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing the MBO Runtime Server.</i> In <i>Selecting Installation Options</i>, select <i>Cluster</i>, then <i>Install the first server node and connect it to the data tier</i>. Enter the rest of the information for the installation. <p>Continue in next row below.</p>
Second server node	<p>Go to the current secondary server node in the MBO Runtime cluster.</p> <p>In this document, under , perform all the tasks in:</p> <ul style="list-style-type: none"> • Adding Cluster Nodes [page 51] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Installing the MBO Runtime Server.</i> In <i>Selecting Installation Options</i>, select <i>Cluster</i>, then <i>Install an additional server node and connect it to the data tier</i>. 2. Enter the rest of the information for the installation. <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
Additional server nodes	<p>(Optional) Go to the server where you are installing the next SAP Mobile Platform Server.</p> <p>In this document, perform all the tasks in:</p> <ul style="list-style-type: none"> • Adding Cluster Nodes [page 51] <p>Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SPO6 installer.</p> <p>Continue in next column.</p>	<p>(Optional) Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing the MBO Runtime Server.</i> In <i>Selecting Installation Options</i>, select <i>Cluster</i>, then <i>Install an additional server node and connect it to the data tier</i>. On the additional installation options installer panel, select <i>Install node as scale-out node</i>. Enter the rest of the information for the installation. <p>Repeat the tasks in this row until you have installed the desired number of server nodes, then continue in next row below.</p>
MBO Runtime cluster verification	<p>N/A</p> <p>Cluster integrity is verified incrementally as you install server nodes.</p> <p>Continue in next column.</p>	<p>Stay on the same server node, or go to any server node in the MBO Runtime cluster.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Verifying the Full SAP Mobile Platform Cluster Installation</i> <p>Continue in next row below.</p>
MBO Runtime database upgrade	<p>N/A</p> <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SPO8</i>, under <i>Upgrading a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing Cluster Nodes for the Upgrade</i> 2. <i>Upgrading the Data Tier</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
MBO Runtime server upgrades	<p>Go to the first server where you installed SAP Platform Mobile Server 3.0 SP08 and MBO Runtime 3.0 SP06.</p> <p>Perform these tasks:</p> <ol style="list-style-type: none"> 1. Restart the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and moves to the last installer panel. 2. Select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime in a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing Cluster Nodes for the Upgrade</i> 2. <i>Upgrading Server Nodes</i> <p>Repeat the tasks in this row on the second server where you installed SAP Mobile Server 3.0 SP08 and MBO Runtime 3.0 SP06, then on any additional servers you installed, then continue in next row below.</p>
Upgraded MBO Runtime cluster verification	N/A	<p>Go to any server node in the MBO Runtime cluster that is not a scale-out node..</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Simple Load-Balancing Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Verifying the Upgraded Cluster</i> <p>Continue in next row below.</p>
Postinstallation	<p>In SAP Mobile Platform 3.0 SP08 <i>Administrator</i>, continue with:</p> <ul style="list-style-type: none"> • <i>Postinstallation Landscape Setup</i> <p>Continue in next column.</p>	<p>In SAP Mobile Platform 2.3 SP06 <i>Landscape Design and Integration</i>, under <i>Stage 3: Implement</i>, continue with:</p> <ul style="list-style-type: none"> • <i>Completing New and Upgrade Installations</i> <p>The installation of your landscape design is complete.</p>

3.3 SAP Mobile Platform Cluster with MBO Runtime Standard Microsoft Failover Cluster

Install SAP Mobile Platform in a cluster as a production environment, with MBO Runtime in a standard Microsoft failover cluster.

Note

To avoid JVM issues, install the 32-bit Microsoft Visual C++ 2010 runtime DLLs on your system before you install or upgrade MBO Runtime.

Note

If you are installing only SAP Mobile Platform, without MBO Runtime Server components, go directly to [Installing SAP Mobile Platform Server \[page 20\]](#).

Table 3:

Component Task	SAP Mobile Platform	MBO Runtime
Database, and server installers	<p>Go to the computer on which you have installed an external database to support the SAP Mobile Platform cluster.</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none">1. Acquiring the Installer [page 20] The server installer image is necessary for configuring the external database to work with SAP Mobile Platform. Be sure to acquire all three installers:<ul style="list-style-type: none">◦ SAP Mobile Platform 3.0 SP08◦ MBO Runtime 3.0 SP06◦ MBO Runtime 3.0 SP082. Under <i>Using an External Database</i>, follow the instructions for your selected database. <p>Continue in next column.</p>	<p>Go to the computer on which you want to install the first MBO Runtime data tier.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none">1. <i>Performing Critical Prerequisite Tasks</i>2. <i>Installing the First Data Tier</i>3. <i>Preparing Microsoft Failover Cluster for Second Data Tier Installation</i>4. On a different server, <i>Installing the Second Data Tier</i> <p>Continue in next row below</p>

Component Task	SAP Mobile Platform	MBO Runtime
First server node	<p>Go to the computer where you want to install the first server node.</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. Acquiring the Installer [page 20] Be sure to acquire all three installers: <ul style="list-style-type: none"> ○ SAP Mobile Platform 3.0 SP08 ○ MBO Runtime 3.0 SP06 ○ MBO Runtime 3.0 SP08 Or copy the installer images you acquired when installing the external database. Skip <i>Using an External Database</i>. 2. Preparing for Installation [page 45] 3. Running the Installer [page 46] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. 4. Verifying the Installation [page 49] <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing the MBO Runtime Server</i> <ul style="list-style-type: none"> ○ In <i>Selecting Installation Options</i>, select <i>Cluster</i>, then <i>Install the first server node and connect it to the data tier</i>. • Enter the rest of the information for the installation. <p>Continue in next row below.</p>
Second server node	<p>Go to the computer where you want to install the second server node.</p> <p>In this document, , perform all the tasks in:</p> <ul style="list-style-type: none"> • Adding Cluster Nodes [page 51] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing the Second MBO Runtime Server Node</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
Additional server nodes	<p>(Optional) Go to the server where you are installing the next SAP Mobile Platform Server.</p> <p>In this document, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Adding Cluster Nodes</i> Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installer run, select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. <p>Continue in next column.</p>	<p>(Optional) Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>(Optional) Installing SAP Mobile Platform Scale-Out Nodes</i> <p>Repeat tasks in this row as necessary, then continue in next row below.</p>
Adding new server nodes	<p>(Optional) Go to the computer on which you want to install a new server node for the cluster.</p> <p>In this document, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Adding Cluster Nodes [page 51]</i> Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server upgrade, select the check box to enable launching the MBO Runtime installer, and enter the path to the MBO Runtime SP06 installer. <p>Continue in next column.</p>	
Cluster verification	<p>N/A</p> <p>Cluster integrity is verified incrementally as you install server nodes.</p> <p>Continue in next column.</p>	<p>Go to any server node in the MBO Runtime cluster that is not a scale-out node.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Verifying the Full SAP Mobile Platform Cluster Installation</i> <p>Continue in next row below.</p>
MBO Runtime database upgrade	<p>N/A</p> <p>Continue in next column.</p>	<p>Go to the computer with the currently active MBO Runtime SP06 data tier.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for the First Data Tier Upgrade</i> 2. <i>Upgrading the First Data Tier</i> 3. <i>Preparing for the Second Data Tier Upgrade</i> 4. <i>Preparing for the Second Data Tier Upgrade</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
MBO Runtime first server node upgrade	<p>Go to the current primary server node in the MBO Runtime cluster.</p> <p>In this document, perform these tasks:</p> <ol style="list-style-type: none"> 1. Start the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and goes to the last installer panel. 2. Select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for the First Data Tier Upgrade</i> 2. <i>Upgrading the First Data Tier</i> 3. <i>Preparing for the Second Data Tier Upgrade</i> 4. <i>Upgrading the Second Data Tier</i> <p>Continue in next row below.</p>
MBO Runtime second server node upgrade	<p>Go to the current secondary server node in the MBO Runtime cluster.</p> <p>In this document, perform these tasks:</p> <ol style="list-style-type: none"> 1. Start the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and goes to the last installer panel. 2. Select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for Server Node Upgrades</i> 2. <i>Upgrading Server Nodes</i> <p>Continue in next row below.</p>
Additional MBO Runtime server node upgrades	<p>If the MBO Runtime cluster has additional server nodes, go to the next one you want to upgrade to SP08.</p> <p>In this document, perform these tasks:</p> <ol style="list-style-type: none"> 1. Start the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and goes to the last installer panel. 2. Select the check box to enable launching the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for Server Node Upgrades</i> 2. <i>Upgrading Server Nodes</i> <p>Repeat tasks in this row as needed, then continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
Upgraded MBO Runtime Cluster verification	N/A Continue in next column.	Stay on the same server node, or go to any server node in the MBO Runtime cluster. <i>In Installation and Upgrade: MBO Runtime Server, under Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster, perform all the tasks in:</i> <ul style="list-style-type: none"> • <i>Verifying the Upgraded Cluster</i> Continue in next row below.
Postinstallation	In SAP Mobile Platform 3.0 SP08 <i>Administrator</i> , continue with: <ul style="list-style-type: none"> • <i>Postinstallation Landscape Setup.</i> Continue in next column.	In SAP Mobile Platform 2.3 SP06 <i>Landscape Design and Integration</i> , Under Stage 3: <i>Implement</i> , continue with: <ul style="list-style-type: none"> • <i>Completing New and Upgrade Installations.</i> The installation of your landscape design is complete.

3.4 SAP Mobile Platform Cluster with MBO Runtime Microsoft Failover Cluster with Shared Hosts

Install SAP Mobile Platform in a cluster as a production environment, with MBO Runtime in a Microsoft failover cluster with shared hosts.

Note

To avoid JVM issues, install the 32-bit Microsoft Visual C++ 2010 runtime DLLs on your system before you install or upgrade MBO Runtime.

Note

If you are installing only SAP Mobile Platform, without MBO Runtime Server components, go directly to [Installing SAP Mobile Platform Server \[page 20\]](#).

Table 4:

Component Task	SAP Mobile Platform	MBO Runtime
Database, and server installer	<p>Go to the computer on which you have installed an external database to support the SAP Mobile Platform cluster.</p> <p>In this document, Under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. Acquiring the Installer [page 20] The server installer image is necessary for configuring the external database to work with SAP Mobile Platform. Be sure to acquire all three installers: <ul style="list-style-type: none"> ◦ SAP Mobile Platform 3.0 SP08 ◦ MBO Runtime 3.0 SP06 ◦ MBO Runtime 3.0 SP08 2. Under <i>Using an External Database</i>, follow the instructions for your selected database. <p>Continue in next column.</p>	<p>Go to the computer on which you want to install the first MBO Runtime data tier.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Microsoft Fail-over Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Performing Critical Prerequisite Tasks</i> 2. <i>Installing the First Data Tier.</i> 3. <i>Preparing Microsoft Failover Cluster for Second Data Tier Installation</i> 4. On a different server, <i>Installing the Second Data Tier.</i> <p>Continue in next row below.</p>
First server node	<p>Go to the computer where you want to install the first server node.</p> <p>In this document, under <i>Installing SAP Mobile Platform Server</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. Acquiring the Installer [page 20] Be sure to acquire all three installers: <ul style="list-style-type: none"> ◦ SAP Mobile Platform 3.0 SP08 ◦ MBO Runtime 3.0 SP06 ◦ MBO Runtime 3.0 SP08 Or copy the installer image you acquired when installing the external database. Skip <i>Using an External Database</i>. 2. Preparing for Installation [page 45] 3. Running the Installer [page 46] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installation, select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. 4. Verifying the Installation [page 49] <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Microsoft Fail-over Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Installing the First MBO Runtime Server Node</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
Second server node	<p>Go to the computer where you want to install the second server node.</p> <p>In this document, On the server where you are installing the second SAP Mobile Platform Server, perform all the tasks in:</p> <ul style="list-style-type: none"> • Adding Cluster Nodes [page 51] Before you click <i>Finish</i> at the end of the SAP Mobile Platform Server installation, select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP06 installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Installing MBO Runtime with a Microsoft Failover Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Installing the Second MBO Runtime Server Node</i> <p>Continue in next row below.</p>
Cluster verification	<p>N/A</p> <p>Cluster integrity is verified incrementally as you install server nodes.</p> <p>Continue in next column.</p>	<p>Stay on the same server node, or go to any server node in the MBO Runtime cluster.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Standard Microsoft Failover Cluster</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Verifying the Full SAP Mobile Platform Cluster Installation</i> <p>Continue in next row below.</p>
First MBO Runtime host upgrade	<p>Go to the computer with the currently active host in the MBO Runtime cluster:</p> <p>Perform these tasks:</p> <ol style="list-style-type: none"> 1. Start the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and goes to the last installer panel. 2. Select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08</i>, under <i>Upgrading a Microsoft Failover Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for the First Host Upgrade</i> 2. <i>Upgrading the First Host</i> <p>Continue in next row below.</p>

Component Task	SAP Mobile Platform	MBO Runtime
Second MBO Runtime host upgrade	<p>Go to the computer with the other host in the MBO Runtime cluster:</p> <p>Perform these tasks:</p> <ol style="list-style-type: none"> 1. Start the SAP Mobile Server SP08 installer. The installer detects the existing SP08 installation and goes to the last installer panel. 2. Select the option to launch the MBO Runtime installer and enter the path to the MBO Runtime SP08 upgrade installer. <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08</i>, under <i>Upgrading a Microsoft Failover Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ol style="list-style-type: none"> 1. <i>Preparing for the Second Host Upgrade</i> 2. <i>Upgrading the Second Host</i> <p>Continue in next row below.</p>
Upgraded MBO Runtime cluster verification	<p>N/A</p> <p>Continue in next column.</p>	<p>Stay on the same computer.</p> <p>In <i>Installation and Upgrade: MBO Runtime Server</i>, under <i>Upgrading MBO Runtime to SP08 > Upgrading a Microsoft Failover Cluster with Shared Hosts</i>, perform all the tasks in:</p> <ul style="list-style-type: none"> • <i>Verifying the Upgraded Cluster</i> <p>Continue in next row below.</p>
Postinstallation	<p>In SAP Mobile Platform 3.0 SP08 <i>Administrator</i>, Continue with:</p> <ul style="list-style-type: none"> • <i>Postinstallation Landscape Setup</i> <p>Continue in next column.</p>	<p>In SAP Mobile Platform 2.3 SP06 <i>Landscape Design and Integration</i>, Under <i>Stage 3: Implement</i>, continue with:</p> <ul style="list-style-type: none"> • <i>Completing New and Upgrade Installations</i>. <p>The installation of your landscape design is complete.</p>

4 Installing SAP Mobile Platform Server

Install SAP Mobile Platform Server and connect to an existing external production database to make this the first server in a cluster installation, or to deploy a low-volume single-server production system that does not require load balancing or failover. Connect to an internal development database to create a single-server development environment that cannot be upgraded to a cluster.

1. [Acquiring the Installer \[page 20\]](#)
The SAP Mobile Platform Server installer image is available as physical media and as a Web download. Optionally, acquire the MBO Runtime installer .zip file.
2. [Using an External Database \[page 21\]](#)
To use an external database in a production installation, you must install and set up that database before running the SAP Mobile Platform Server installer.
3. [Preparing for Installation \[page 45\]](#)
Ensure that the host on which you are installing SAP Mobile Platform is ready for you to begin the installation.
4. [Running the Installer \[page 46\]](#)
Start the SAP Mobile Platform Server installer, accept the end-user license agreement and specify installation options, then launch and complete the installation process.
5. [Verifying the Installation \[page 49\]](#)
Check for errors in the installation logs, then verify that you can start the server and log in to Management Cockpit.

4.1 Acquiring the Installer

The SAP Mobile Platform Server installer image is available as physical media and as a Web download. Optionally, acquire the MBO Runtime installer .zip file.

Procedure

Use one of these methods:

- Insert the physical installation media.
- Download from the software distribution center on SAP Service Marketplace:
 1. Go to <http://service.sap.com/swdc>.
 2. Agree to the terms displayed and log in to the Web site.
 3. Under "A-Z Index" click [Installations and Upgrades](#).
 4. Click [M](#).
 5. Click [SAP MOBILE PLATFORM](#).

6. Click the link for the current version.
7. Click the link for SP08.
8. Download the package for the SAP Mobile Platform Server SP08 installer.
9. Extract the entire contents of the installer .zip file to a temporary directory on a local disk on the target host.

Use a short path, preferably a folder directly below the root directory, such as `C:\temp`. The path can include only ASCII alphanumeric characters, underscore (_), hyphen (-), and period (.). Two consecutive period characters are not allowed.

To install the MBO Runtime component, follow the steps above to download both:

- The MBO Runtime SP05 installer .zip file.
- The MBO Runtime SP08 installer .zip file.

To upgrade the MBO Runtime component, follow the steps above to download only:

- The MBO Runtime SP08 installer .zip file.
- Download from your network.

4.2 Using an External Database

To use an external database in a production installation, you must install and set up that database before running the SAP Mobile Platform Server installer.

Context

The SAP Mobile Platform database stores metadata—data about the data that passes through the SAP Mobile Platform system. This includes information about native and hybrid applications, execution requests between client and server, back-end notification requests, and usage statistics. You can view this data in the Management Cockpit, where you manage and monitor applications. You do not need to encrypt this data.

Use an external database for a production installation: SAP HANA, SAP ASE, SAP SQL Anywhere, DB2, Oracle, or Microsoft SQL Server. Install the database before you install SAP Mobile Platform Server, using the instructions for your selected database in the sections that follow.

For a development installation, the default SAP SQL Anywhere database included with SAP Mobile Platform requires no separate installation or setup. To use the default SAP SQL Anywhere database in a development installation, skip this section and continue with [Running the Installer \[page 46\]](#).

Note

If you are planning to install the MBO Runtime component at the same time that you install SAP Mobile Platform:

- The single-server MBO Runtime installation automatically installs the database on the same server. The SAP Mobile Platform Server installer launches the MBO Runtime installer when the single-server SAP Mobile Platform Server installation completes.
- For all MBO Runtime cluster installations, you must install one or more data tiers, together with any supporting Microsoft Failover Cluster software, before you install any MBO Runtime Servers. Manually

launch the MBO Runtime installer to install each data tier that is required for your MBO Runtime installation scenario.

[Setting Up an External SAP HANA Database \[page 22\]](#)

Install SAP HANA® anywhere on the same network where you will be installing SAP Mobile Platform.

[Setting Up an External SAP ASE Database \[page 25\]](#)

Install SAP Adaptive Server® Enterprise (SAP ASE), then modify and run a setup script to configure it to work with SAP Mobile Platform.

[Setting Up an External SAP SQL Anywhere Database \[page 30\]](#)

Install SAP SQL Anywhere version 16.0 or later, and configure it to work with SAP Mobile Platform.

[Setting Up an External DB2 Database \[page 33\]](#)

Install DB2®, then modify and run a setup script to configure it to work with SAP Mobile Platform.

[Setting Up an External Oracle Database \[page 36\]](#)

Install Oracle™, then modify and run a setup script to configure it to work with SAP Mobile Platform, and download the Oracle JDBC driver.

[Setting Up an External Microsoft SQL Server Database \[page 41\]](#)

Install Microsoft® SQL Server™, then modify and run a setup script to configure it to work with SAP Mobile Platform.

4.2.1 Setting Up an External SAP HANA Database

Install SAP HANA® anywhere on the same network where you will be installing SAP Mobile Platform.

Context

Note

In the steps below, `<installer_root>` is the root directory in the installer image.

Procedure

1. Verify that SAP Mobile Platform supports the version of SAP HANA you are planning to use.
 - a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>



- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
 - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install SAP HANA anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

Note

There is no 001_SMP3_drop_and_create_user.DDL script to run to prepare SAP HANA to work with SAP Mobile Platform. Just enter the host name, port number, user name and password when prompted by the SAP Mobile Platform Server installer.

3. (Optional) Configure your SAP HANA database to support Mobiliser.
See [Configuring SAP HANA to Support Mobiliser \[page 23\]](#).
4. (Optional) Create a customized HANA database schema for the database user, `<dbUserName>`:

```
drop schema <schemaName> cascade;  
create schema <schemaName> owned by <dbUserName>;
```

4.2.1.1 Configuring SAP HANA to Support Mobiliser

To support Mobiliser applications with SAP HANA on your SAP Mobile Platform Server, make SAP HANA-specific changes to the `dbmaintain` script and execute it.

Procedure

1. Edit the `dbmaintain` script.
 - a. Make a backup copy of `<installer_root>\db_tools\db\hdb\smp3\sql\dbmaintain.properties.hana`.
 - b. Use a text editor to open `<installer_root>\db_tools\db\hdb\smp3\sql\dbmaintain.properties.hana`.
 - c. Edit this line:

```
database.url=jdbc:sap://{HOST}:{PORT}/
```

Make these replacements, including the braces ("{" and "}"):

- {HOST} with the host name for your database
- {PORT} with the port number for your database

- {DBNAME} with the default schema name for the HANA database (the SAP HANA user name that installed the SAP Mobile Platform database), or the customized schema name for the HANA database if you changed the default
 - d. Save and close the file.
2. Run the dbmaintain scripts against your database.
- a. In a command prompt, go to <installer_root>\db_tools\db\hdb\smp3\sql.
 - b. Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-hdb.jar -c dbmaintain.properties.hana -u <dbusername> -p <dbpassword>
```

Where:

- <version> is the actual version text in the file name on your system.
- <dbusername> is the database name, **gomobile**, or the new user name if you changed it.
- <dbpassword> is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- c. Enter:

```
java -jar com.sap.mobile.platform.server.db.hana.dbmaintain-<version>-scriptarchive-hana.jar -c dbmaintain.properties.hana -u <dbusername> -p <dbpassword>
```

Where:

- <version> is the actual version text in the file name on your system.
- <dbusername> is the database name, **gomobile**, or the new user name if you changed it.
- <dbpassword> is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- d. Respond to the Are you sure you want to continue? prompt.

When the dbmaintain script has successfully connected to your database, if the dbMaintainer.fromScratch.enabled parameter is true, the script warns you that any existing objects in the database will be dropped if you continue.

- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
- To preserve existing objects in your database:
 1. Answer no to the prompt.
 2. Edit this line in the dbmaintain script, replacing true with false:

```
dbMaintainer.fromScratch.enabled=true
```

3. Re-run the dbmaintain script.
- e. Review the "Dry Run Results" and continue if there are no issues.

The script takes several minutes to complete, then ends with:
The database has been updated successfully.

4.2.2 Setting Up an External SAP ASE Database

Install SAP Adaptive Server® Enterprise (SAP ASE), then modify and run a setup script to configure it to work with SAP Mobile Platform.

Context

Note

In the steps below, `<installer_root>` is the root directory in the installer image.

Procedure

1. Verify that SAP Mobile Platform supports the version of SAP ASE you are planning to use.
 - a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
 - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install SAP ASE anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

If you are not sure what values to specify when you install or configure your database, use the settings below to get started.

Table 5:

Setting	Value
Page size	16 KB

Record the values for these parameters:

- Host name – the host system on which the database software is installed.
 - Login – the admin login for the database software.
 - Port number – the port number the database software uses.
3. If you installed SAP ASE on a different server from the one where you will install SAP Mobile Platform Server, copy the `db_tools` directory (and all subdirectories) from the SAP Mobile Platform Server installer image to a temporary location on the database server.

In the steps below, `<installer_root>` will refer to the directory into which you copied `db_tools`.

4. Edit the `001_SMP3_drop_and_create_user.DDL` script:
- a. Use a text editor to open the `<installer_root>\db_tools\db\ase\smp3\sql\001_SMP3_drop_and_create_user.DDL` file.
 - b. Change all instances of "256M" to "512M" to increase database size.

Replace highlighted instances of 256M below with 512M:

```
disk init
name = "smp3data",
physname = "c:\SAP\data\smp3.dat",
size = "256M",
directio = true
go
disk init
name = "smp3log",
physname = "c:\SAP\data\smp3.log",
size = "256M",
directio = true
go
...
create database smp3
on smp3data="256M"
log on smp3log="256M"
go
...
```

- c. Locate the following two lines and replace `c:\SAP\data\` with the path to where you want your SAP Mobile Platform database to be created.

```
physname = "c:\SAP\data\smp3.dat",
...
physname = "c:\SAP\data\smp3.log",
```

Note

The path for your SAP Mobile Platform data is independent of the path that you set for your SAP Mobile Platform installation directory. If you place your database files within the SAP Mobile Platform installation directory tree, the SAP Mobile Platform uninstaller will not remove them.

Caution

Do not place your data under the `<SMP_HOME>\Server` directory. The upgrade installer must completely replace the contents of that directory.

- d. (Optional) Change database name, user name, and password.

This example shows a contiguous block of the noncomment lines in the 001_SMP3_drop_and_create_user.DDL file for SAP ASE:

Replace:

- **smp3** with the new database name.
- **gomobile** with the new database user name.
- **secret** with the new database user password.

Be sure to:

- Refer to your database documentation for limitations on length and allowable characters for these parameters.
- Replace all instances of each default text string in the 001_SMP3_drop_and_create_user.DDL script with the same value.
- Make note of the changes you make. You will need to enter the changed values during SAP Mobile Platform Server installation.

Replace highlighted items below as needed to implement the changes you wish to make.

```
...
disk init
name = "smp3data",
physname = "c:\SAP\data\smp3.dat"
size = "512M",
directio = true
go
disk init
name = "smp3log",
physname = "c:\SAP\data\smp3.log",
size = "512M",
directio = true
go
sp_addlogin "gomobile", "secret"
go
sp_configure "lock scheme", 0, datarows
go
drop database smp3
go
create database smp3
    on smp3data="512M"
    log on smp3log="512M"
go
exec sp_dboption 'smp3', 'select into/bulkcopy/pllsort', true
go
sp_configure 'enable functionality group', 1
go
use smp3
go
checkpoint
go
sp_adduser gomobile
go
grant all to gomobile
go
...
```

5. Save and close the file.
6. Run the 001_SMP3_drop_and_create_user.DDL script.
 1. Open a Windows command prompt.

2. In the SAP Mobile Platform installer image, navigate to:

```
<installer_root>\db_tools\db\ase\smp3\sql
```

3. Enter:

```
isql -S<servername> -U<username> -P<password> -i  
001_SMP3_drop_and_create_user.DDL
```

where:

- <servername> is the server where SAP ASE is installed.
- <username> is an admin user, such as sa.
- <password> is the password for <username>.

7. Make sure the database resources—number of connections, available space, permissions, and threads, plus any other parameters that you would tune to support a major application—can support SAP Mobile Platform.

For example, make a minimum of 25 database connections available for SAP Mobile Platform Server.

8. Configure the database so that it increments its size automatically as additional disk space is needed. Refer to the ASE documentation for details on the command to do this.

i Note

If the database ever exceeds the allocated size, SAP Mobile Platform Server cannot start. If you set a high logging level for database transactions, closely monitor the database size relative to available disk space.

9. (Optional) Configure your SAP ASE database to support Mobiliser.

See [Configuring ASE to Support Mobiliser \[page 28\]](#).

4.2.2.1 Configuring ASE to Support Mobiliser

To support Mobiliser applications with SAP Adaptive Server Enterprise (SAP ASE) on your SAP Mobile Platform Server, make SAP ASE-specific changes to the `dbmaintain` script and execute it.

Procedure

1. Edit the `dbmaintain` script.
 - a. Make a backup copy of `<installer_root>\db_tools\db\ase\smp3\sql\dbmaintain.properties.ase`.
 - b. Use a text editor to open `<installer_root>\db_tools\db\ase\smp3\sql\dbmaintain.properties.ase`.
 - c. Edit this line:

```
database.url=jdbc:sybase:Tds:{HOST}:{PORT}/{DBNAME}
```

Replace these values:

- {HOST} with the host name for your database
- {PORT} with the port number for your database
- {DBNAME} with **smp3**, or the new database name if you changed it

d. Save and close the file.

2. Run the dbmaintain scripts against your database.

- In a command prompt, go to `<installer_root>\db_tools\db\ase\smp3\sql`.
- Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-ase.jar -c dbmaintain.properties.ase -u <dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

c. Enter:

```
java -jar com.sap.mobile.platform.server.db.ase.dbmaintain-<version>-scriptarchive-ase.jar -c dbmaintain.properties.ase -u <dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

d. Respond to the Are you sure you want to continue? prompt.

When the dbmaintain script has successfully connected to your database, if the dbMaintainer.fromScratch.enabled parameter is true, the script warns you that any existing objects in the database will be dropped if you continue.

- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
- To preserve existing objects in your database:
 1. Answer no to the prompt.
 2. Edit this line in the dbmaintain script, replacing true with false:

```
dbMaintainer.fromScratch.enabled=true
```

3. Re-run the dbmaintain script.

- e. Review the "Dry Run Results" and continue if there are no issues.

The script takes several minutes to complete, then ends with:

The database has been updated successfully.

4.2.3 Setting Up an External SAP SQL Anywhere Database

Install SAP SQL Anywhere version 16.0 or later, and configure it to work with SAP Mobile Platform.

Context

Note

In the steps below, `<installer_root>` is the root directory in the installer image.

Procedure

1. Verify that SAP Mobile Platform supports the version of SQL Anywhere you are planning to use.
 - a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>



- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
 - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install SQL Anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

Record the values for these parameters:

- Host name – the host system on which the database software is installed.
 - Login – the admin login for the database software.
 - Port number – the port number the database software uses.
3. Navigate to the `bin` subdirectory of your SQL Anywhere installation.
 4. Initialize the database:

- On Windows, run:

```
dbinit.exe -b -z UTF8 -zn UTF8 -ze UTF8 -p 8192 <dbname>.db
```

where <dbname> is the full path and file name of the SQL Anywhere database.

- On Linux, run:

```
./dbinit -b -z UTF8 -zn UTF8 -ze UTF8 -p 8192 <dbname>.db
```

5. Using Sybase Central or a third-party tool, create a new database for SAP Mobile Platform:

- a. Connect to the database with the default credentials, username = dba; password = sql.
- b. Execute the following SQL statements:

```
CREATE USER <username> IDENTIFIED BY <password> FORCE PASSWORD CHANGE OFF;
grant all,dba to <username>;
update spt_mda set querytype = 4, query = '0' where mdinfo =
'SET_READONLY_FALSE';
update spt_mda set querytype = 4, query = '0' where mdinfo =
'SET_READONLY_TRUE';
update spt_mda set querytype = 4, query = '0' where mdinfo = 'SET_CATALOG';
SET OPTION non_keywords = 'PRECISION, MESSAGE';
```

6. (Optional) Configure your database to support Mobiliser.

See [Configuring SQL Anywhere to Support Mobiliser \[page 31\]](#).

4.2.3.1 Configuring SQL Anywhere to Support Mobiliser

Configure SQL Anywhere to support Mobiliser applications in SAP Mobile Platform by updating and executing the dbmaintain script.

Procedure

1. Edit the dbmaintain script.
 - a. Make a backup copy of <installer_root>\db_tools\db\sa\smp3\sql\dbmaintain.properties.sqlanywhere.
 - b. Use a text editor to open <installer_root>\db_tools\db\sa\smp3\sql\dbmaintain.properties.sqlanywhere.
 - c. Edit this line:

```
database.url=jdbc:sybase:Tds:{HOST}:{PORT}/{DBNAME}
```

Replace these values:

- {HOST} with the host name for your database
 - {PORT} with the port number for your database
 - {DBNAME} with **smp3**, or the new database name if you changed it
- d. Save and close the file.

2. Run the dbmaintain script.

- a. At a command prompt, go to `<installer_root>\db_tools\db\sa\sql`.
- b. Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-  
anywhere.jar -c dbmaintain.properties.sqlanywhere -u <dbusername> -p  
<dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- c. Enter:

```
java -jar com.sap.mobile.platform.server.db.sa.dbmaintain- <version>-  
scriptarchive-anywhere.jar -c dbmaintain.properties.sqlanywhere -u  
<dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform, or another available instance.

- d. Respond to the `Are you sure you want to continue?` prompt.
- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
 - Otherwise, if the value of the `dbMaintainer.fromScratch.enabled` parameter is true, the script warns you that any existing objects in the database will be dropped if you continue. To preserve existing objects in your database:
 1. Answer no to the prompt.
 2. Edit this line in the `dbmaintain` script, and change true to false:

```
dbMaintainer.fromScratch.enabled=true
```

3. Rerun the `dbmaintain` script.
- e. Review the "Dry Run Results" and continue if there are no issues.
- After several minutes, you should see:
- The database has been updated successfully.

4.2.4 Setting Up an External DB2 Database

Install DB2®, then modify and run a setup script to configure it to work with SAP Mobile Platform.

Context

Note

In the steps below, `<installer_root>` is the root directory in the installer image.

Procedure

1. Verify that SAP Mobile Platform supports the version of DB2 you are planning to use.
 - a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
 - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install DB2 anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

Record the values for these parameters:

- Host name – the host system on which the database software is installed.
- Login – the admin login for the database software.
- Port number – the port number the database software uses.

3. If you installed DB2 on a different server from the one where you will install SAP Mobile Platform Server, copy the `db_tools` directory (and all subdirectories) from the SAP Mobile Platform Server installer image to a temporary location on the database server.

In the steps below, `<installer_root>` will refer to the directory into which you copied `db_tools`.

4. (Optional) Change database name and user name.
 - a. Use a text editor to open the `<installer_root>\db_tools\db\db2\smp3\sql\001_SMP3_drop_and_create_user.DDL` file.
 - b. Change default values for database name and user name.

This example shows a contiguous block of the noncomment lines in the 001_SMP3_drop_and_create_user.DDL file for DB2. Replace:

- **smp3** with the new database name.
- **gomobile** with the new database user name.

Be sure to:

- Refer to your database documentation for limitations on length and allowable characters for these parameters.
- Replace all instances of each default text string in the 001_SMP3_drop_and_create_user.DDL script with the same value.
- Make note of the changes you make. You will need to enter the changed values during SAP Mobile Platform Server installation.

Replace highlighted items below as needed to implement the changes you wish to make.

```
...  
CREATE DATABASE smp3 AUTOMATIC STORAGE YES USINGCODESET UTF-8 TERRITORY US  
COLLATE USING SYSTEM PAGESIZE 32 K;  
CONNECT TO smp3;  
CREATE SCHEMA gomobile AUTHORIZATION gomobile;  
CREATE ROLE SY365_OBJOWNER;  
GRANT CREATEIN ON SCHEMA smp3 TO SY365_OBJOWNER;  
GRANT SY365_OBJOWNER TO USER gomobile;  
...
```

i Note

You create the DB2 user name and set the password at the operating system level and, by convention, DB2 uses the same name for the schema. The default 001_SMP3_drop_and_create_user.DDL file assumes that "gomobile" is the user name created for DB2.

- c. Save and close the file.
5. Run the 001_SMP3_drop_and_create_user.DDL script.
 1. Open a Windows command prompt.
 2. In the SAP Mobile Platform installer image, navigate to:

```
<installer_root>\db_tools\db\db2\smp3\sql
```

3. Enter:

```
db2 -tvsvf 001_SMP3_drop_and_create_user.DDL
```

6. Make sure the database resources—number of connections, available space, permissions, and threads, plus any other parameters that you would tune to support a major application—can support SAP Mobile Platform.

For example, make a minimum of 25 database connections available for SAP Mobile Platform Server.

7. Increase the database logfile size.

Open the database command line interface and execute this command:

```
UPDATE DATABASE CONFIGURATION FOR <db_name>> USING LOGFILESIZE
```

Where <db_name> is either the default name, smp3, or the new database name that you supplied above.

8. (Optional) Configure your DB2 database to support Mobiliser.

See [Configuring DB2 to Support Mobiliser \[page 35\]](#).

4.2.4.1 Configuring DB2 to Support Mobiliser

To support Mobiliser applications with DB2 on your SAP Mobile Platform Server, make DB2-specific changes to the `dbmaintain` script and execute it.

Procedure

1. Edit the `dbmaintain` script.
 - a. Make a backup copy of `<installer_root>\db_tools\db\db2\smp3\sql\dbmaintain.properties.db2`.
 - b. Use a text editor to open `<installer_root>\db_tools\db\db2\smp3\sql\dbmaintain.properties.db2`.
 - c. Edit this line:

```
database.url=jdbc:db2://{HOST}:{PORT}/{DBNAME}
```

Replace these values:

- `{HOST}` with the host name for your database
- `{PORT}` with the port number for your database
- `{DBNAME}` with `smp3`, or the new database name if you changed it

- d. Save and close the file.
2. Run the `dbmaintain` scripts against your database.
 - a. In a command prompt, go to `<installer_root>\db_tools\db\db2\smp3\sql`.
 - b. Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-  
db2.jar -c dbmaintain.properties.db2 -u <dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, `gomobile`, or the new user name if you changed it.
- `<dbpassword>` is the database password, `secret`, or the new password if you changed it.

i Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- c. Enter:
- ```
java -jar com.sap.mobile.platform.server.db.db2.dbmaintain-<version>-
scriptarchive-db2.jar -c dbmaintain.properties.db2 -u <dbusername> -p
<dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

#### Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- d. Respond to the `Are you sure you want to continue?` prompt.

When the `dbmaintain` script has successfully connected to your database, if the `dbMaintainer.fromScratch.enabled` parameter is `true`, the script warns you that any existing objects in the database will be dropped if you continue.

- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
- To preserve existing objects in your database:
  1. Answer no to the prompt.
  2. Edit this line in the `dbmaintain` script, replacing `true` with `false`:

```
dbMaintainer.fromScratch.enabled=true
```

3. Re-run the `dbmaintain` script. again.

- e. Review the "Dry Run Results" and continue if there are no issues.

The script takes several minutes to complete, then ends with:  
The database has been updated successfully.

## 4.2.5 Setting Up an External Oracle Database

Install Oracle™, then modify and run a setup script to configure it to work with SAP Mobile Platform, and download the Oracle JDBC driver.

### Context

#### Note

In the steps below, `<installer_root>` is the root directory in the installer image.

### Procedure

1. Verify that SAP Mobile Platform supports the version of Oracle you are planning to use.

- a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

#### Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
  - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install Oracle anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

Record the values for these parameters:

- Host name – the host system on which the database software is installed.
  - Login – the admin login for the database software.
  - Port number – the port number the database software uses.
3. If you installed Oracle on a different server from the one where you will install SAP Mobile Platform Server, copy the `db_tools` directory (and all subdirectories) from the SAP Mobile Platform Server installer image to a temporary location on the database server.

In the steps below, `<installer_root>` will refer to the directory into which you copied `db_tools`.

4. Edit the `001_SMP3_drop_and_create_user.DDL` script.

1. Open a Windows command prompt.
2. In the SAP Mobile Platform installer image, navigate to:

```
<installer_root>\db_tools\db\oracle\smp3\sql
```

3. Use a text editor to open `001_SMP3_drop_and_create_user.DDL` from this location.
4. (Optional) As the last line in the `001_SMP3_drop_and_create_user.DDL` file, enter:

```
EXIT;
```

5. Change user name and password.

This example shows a contiguous block of the noncomment lines in the `001_SMP3_drop_and_create_user.DDL` file for Oracle. Replace:

- **GOMOBILE** with the new database user name.
- **SECRET** with the new database user password.

Be sure to:

- Refer to your database documentation for limitations on length and allowable characters for these parameters.
- Replace all instances of each default text string in the `001_SMP3_drop_and_create_user.DDL` script with the same value.
- Make note of the changes you make. You will need to enter the changed values during SAP Mobile Platform Server installation.

Replace highlighted items below as needed to implement the changes you wish to make.

```
...
DROP USER GOMOBILE CASCADE;
CREATE USER GOMOBILE
 IDENTIFIED BY SECRET
 DEFAULT TABLESPACE USERS
 TEMPORARY TABLESPACE TEMP
 PROFILE DEFAULT
 ACCOUNT UNLOCK;
GRANT SY365_OBJOWNER TO GOMOBILE;
GRANT CREATE SESSION TO GOMOBILE;
GRANT CONNECT TO GOMOBILE;
ALTER USER GOMOBILE DEFAULT ROLE ALL;
ALTER USER GOMOBILE QUOTA UNLIMITED ON USERS;
```

### **i** Note

Oracle does not define a database name as such, and by convention uses the same name for the user and the schema. The SAP Mobile Platform Server installer needs either the Oracle service name or SID to connect to your Oracle database.

6. Save and close 001\_SMP3\_drop\_and\_create\_user.DDL.
7. Enter:

```
sqlplus <username>/<password>@<servername>
@001_SMP3_drop_and_create_user.DDL > smp3.log
```

Where:

- <servername> is the server where Oracle is installed.
- <username> is an admin user, such as sa.
- <password> is the password for <username>.

In most cases, the user that the script is dropping does not exist, so the following error message is normal:  
DROP USER GOMOBILE CASCADE \* ERROR at line 1: ORA-01918: user 'GOMOBILE' does not exist

5. Make sure the database resources—number of connections, available space, permissions, and threads, plus any other parameters that you would tune to support a major application—can support SAP Mobile Platform.

For example, make a minimum of 25 database connections available for SAP Mobile Platform Server.

6. Download the JDBC driver from [oracle.com](http://oracle.com) for the version of Oracle you are using.

The installer will ask you for the path to this driver.

7. Make a minimum of 25 database connections available for SAP Mobile Platform Server.
8. (Optional) Configure your Oracle database to support Mobiliser.

See [Configuring Oracle to Support Mobiliser \[page 39\]](#).

## 4.2.5.1 Configuring Oracle to Support Mobiliser

To support Mobiliser applications with Oracle on your SAP Mobile Platform Server, make Oracle-specific changes to the `dbmaintain` script and execute it.

### Procedure

1. Edit the `dbmaintain` script.

- a. Make a backup copy of `<installer_root>\db_tools\db\oracle\smp3\sql\dbmaintain.properties.oracle-<xxx>`.

Where `<xxx>` is either `sid` or `svc`, depending on the connection mode set during Oracle installation.

- b. Use a text editor to open `<installer_root>\db_tools\db\oracle\smp3\sql\dbmaintain.properties.oracle-<xxx>`.
- c. Enter the location of the JDBC driver that was downloaded for use with SAP Mobile Platform Server. Locate this line, and enter the JDBC driver location after the equal sign:

```
database.driverLocation=
```

#### **i** Note

Use two backslashes to represent each single backslash in the path. For example, for the file `c:\temp\ojdb6.jar`, enter `C:\\temp\\ojdb6.jar`.

- d. Replace terms in braces with appropriate values for your system.

Replace these values:

- `{HOST}` with the host name for your database
- `{PORT}` with the port number for your database
- `{DBNAME}` with `smp3`, or the new database name if you changed it

- e. Save and close the file.

2. Run the `dbmaintain` script against your database.

- a. In a command prompt, go to `<installer_root>\db_tools\db\oracle\smp3\sql`.
- b. Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-
oracle.jar -c dbmaintain.properties.oracle-<xxx> -u <dbusername> -p
<dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<xxx>` is either `sid` or `svc`, depending on the connection mode set during Oracle installation.
- `<dbusername>` is the database name, `gomobile`, or the new user name if you changed it from the "gomobile" default.
- `<dbpassword>` is the database password, `secret`, or the new password if you changed it from the "secret" default.

### Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

c. Enter:

```
java -jar com.sap.mobile.platform.server.db.oracle.dbmaintain-<version>-
scriptarchive-oracle.jar -c dbmaintain.properties.oracle-<xxx> -u
<dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<xxx>` is either `sid` or `svc`, depending on the connection mode set during Oracle installation.
- `<dbusername>` is the database name, `gomobile`, or the new user name if you changed it from the "gomobile" default.
- `<dbpassword>` is the database password, `secret`, or the new password if you changed it from the "secret" default.

### Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

d. Respond to the `Are you sure you want to continue?` prompt.

When the `dbmaintain` script has successfully connected to your database, if the `dbMaintainer.fromScratch.enabled` parameter is `true`, the script warns you that any existing objects in the database will be dropped if you continue.

- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
- To preserve existing objects in your database:
  1. Answer no to the prompt.
  2. Edit this line in the `dbmaintain` script, replacing `true` with `false`:

```
dbMaintainer.fromScratch.enabled=true
```

3. Re-run the `dbmaintain` script.

e. Review the "Dry Run Results" and continue if there are no issues.

The script takes several minutes to complete, then ends with:

The database has been updated successfully.



## 4.2.6 Setting Up an External Microsoft SQL Server Database

Install Microsoft® SQL Server™, then modify and run a setup script to configure it to work with SAP Mobile Platform.

### Context

#### Note

In the steps below, `<installer_root>` is the root directory in the installer image.

### Procedure

1. Verify that SAP Mobile Platform supports the version of SQL Server you are planning to use.
  - a. Go to the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

#### Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

- b. Under the Essentials heading in the upper right corner, click the "Open in New Window" link to open the *Support Matrices...* PowerPoint file.
  - c. Click through to the SAP Note for persistence databases supported by SAP Mobile Platform 3.0.
2. Install SQL Server anywhere on the same network where you will be installing SAP Mobile Platform. Consult with your company's database administrator, or have the database administrator perform the installation for you.

Record the values for these parameters:

- Host name – the host system on which the database software is installed.
  - Login – the admin login for the database software.
  - Port number – the port number the database software uses.
3. In Microsoft SQL Server Management Studio, under Server Properties, set Server Authentication to SQL Server and Windows Authentication Mode.
  4. If you installed SQL Server on a different server from the one where you will install SAP Mobile Platform Server, copy the `db_tools` directory (and all subdirectories) from the SAP Mobile Platform Server installer image to a temporary location on the database server.

In the steps below, `<installer_root>` will refer to the directory into which you copied `db_tools`.

5. Edit the 001\_SMP3\_drop\_and\_create\_user.DDL script:

- a. Use a text editor to open the <installer\_root>\db\_tools\db\sqlserver\smp3\sql\001\_SMP3\_drop\_and\_create\_user.DDL file.
- b. (Optional) Change database name, user name, and password.

This example shows a contiguous block of the noncomment lines in the 001\_SMP3\_drop\_and\_create\_user.DDL file for SQL Server:

Replace:

- o **smp3** with the new database name.
- o **gomobile** with the new database user name.
- o **secret** with the new database user password.

Be sure to:

- o Refer to your database documentation for limitations on length and allowable characters for these parameters.
- o Replace all instances of each default text string in the 001\_SMP3\_drop\_and\_create\_user.DDL script with the same value.
- o Make note of the changes you make. You will need to enter the changed values during SAP Mobile Platform Server installation.

Replace highlighted items below as needed to implement the changes you wish to make.

```
USE master
GO
CREATE DATABASE smp3
GO
CREATE LOGIN gomobile
 WITH PASSWORD = 'secret', CHECK_EXPIRATION=OFF, CHECK_POLICY=OFF
go
use smp3
go
CREATE SCHEMA [gomobile]
GO
CREATE USER [gomobile] FOR LOGIN [gomobile] WITH DEFAULT_SCHEMA=[gomobile]
GO
/**** add role ****/
USE [smp3]
GO
EXEC sp_addrolemember N'db_owner', N'gomobile'
GO
```

6. Save and close the file.
7. Run the 001\_SMP3\_drop\_and\_create\_user.DDL script.

1. Open a Windows command prompt.
2. In the SAP Mobile Platform installer image, navigate to:

```
<installer_root>\db_tools\db\sqlserver\smp3\sql
```

3. Enter:

```
sqlcmd -S<servername> -U<username> -P<password> -
i001_SMP3_drop_and_create_user.DDL
```

where:

- `<servername>` is the server where SQL Server is installed, optionally including a protocol, instance name, and port number in this format:  
`[<protocol>:]<servername>[\<instancename>][,<port>]`.
  - `<username>` is an admin user, such as `sa`.
  - `<password>` is the password for `<username>`.
8. Make sure the database resources—number of connections, available space, permissions, and threads, plus any other parameters that you would tune to support a major application—can support SAP Mobile Platform.
- For example, make a minimum of 25 database connections available for SAP Mobile Platform Server.
9. Configure the database so that it increments its size automatically as additional disk space is needed. Refer to the SQL Server documentation for details on the command to do this.

**i Note**

If the database ever exceeds the allocated size, SAP Mobile Platform Server cannot start. If you set a high logging level for database transactions, closely monitor the database size relative to available disk space.

10. (Optional) Configure your SQL Server database to support Mobiliser.

See [Configuring Microsoft SQL Server to Support Mobiliser \[page 43\]](#).

## 4.2.6.1 Configuring Microsoft SQL Server to Support Mobiliser

To support Mobiliser applications with SQL Server on your SAP Mobile Platform Server, make SQL Server-specific changes to the `dbmaintain` script and execute it.

### Procedure

1. Edit the `dbmaintain` script.
  - a. Make a backup copy of `<installer_root>\db_tools\db\sqlserver\smp3\sql\dbmaintain.properties.mssql`.
  - b. Use a text editor to open `<installer_root>\db_tools\db\sqlserver\smp3\sql\dbmaintain.properties.mssql`.
  - c. Enter the location of the JDBC driver that was downloaded for use with SAP Mobile Platform Server. Locate this line, and enter the JDBC driver location after the equal sign:

```
database.driverLocation=
```

**i Note**

Use two backslashes to represent each single backslash in the path. For example, for the file `c:\temp\sqljdbc_<version>.jar`, enter `C:\\temp\\sqljdbc_<version>.jar`.

- d. Edit this line:

```
database.url=jdbc:sqlserver://{HOST}:{PORT};databaseName={DBNAME};
```

Replace these values:

- {HOST} with the host name for your database
- {PORT} with the port number for your database
- {DBNAME} with **smp3**, or the new database name if you changed it

- e. Save and close the file.

2. Run the dbmaintain scripts against your database.

- a. In a command prompt, go to `<installer_root>\db_tools\db\sqlserver\smp3\sql`.
- b. Enter:

```
java -jar com.sybase365.mobiliser.vanilla.standalone-<version>-scriptarchive-sqlserver.jar -c dbmaintain.properties.mssql -u <dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

#### **i** Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- c. Enter:

```
java -jar com.sap.mobile.platform.server.db.sqlserver.dbmaintain-<version>-scriptarchive-sqlserver.jar -c dbmaintain.properties.mssql -u <dbusername> -p <dbpassword>
```

Where:

- `<version>` is the actual version text in the file name on your system.
- `<dbusername>` is the database name, **gomobile**, or the new user name if you changed it.
- `<dbpassword>` is the database password, **secret**, or the new password if you changed it.

#### **i** Note

Use Java 7 to invoke this command: either the Java instance that is installed with SAP Mobile Platform Server, or any other available instance.

- d. Respond to the `Are you sure you want to continue?` prompt.

When the dbmaintain script has successfully connected to your database, if the `dbMaintainer.fromScratch.enabled` parameter is true, the script warns you that any existing objects in the database will be dropped if you continue.

- If this is a fresh installation on a new system, you may safely answer yes to this prompt, and the script continues.
- To preserve existing objects in your database:
  1. Answer no to the prompt.

2. Edit this line in the `dbmaintain` script, replacing `true` with `false`:

```
dbMaintainer.fromScratch.enabled=true
```

3. Re-run the `dbmaintain` script.
- e. Review the "Dry Run Results" and continue if there are no issues.  
The script takes several minutes to complete, then ends with:  
The database has been updated successfully.

## 4.3 Preparing for Installation

Ensure that the host on which you are installing SAP Mobile Platform is ready for you to begin the installation.

### Procedure

1. Verify that the installation target host meets minimum system requirements for all SAP Mobile Platform components you are installing.

See the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

#### Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

Additional hardware and software requirements for SAP Mobile Platform Server are documented in these SAP Notes:

- [SAP Note 1904213](#) provides information about minimum hardware and software requirements for:
    - Web browsers for Management Cockpit
    - JDK
    - Reverse proxies
    - Afaria
    - Introscope
    - LDAP servers
    - Virtual machines.
  - [SAP Note 1904620](#) provides information about back-end requirements.
2. Verify that you have Administrator privileges on the installation target host.
  3. Remove the `JAVA_TOOL_OPTIONS` environment variable.  
Check for `JAVA_TOOL_OPTIONS` in both User Variables and System Variables panes of the Environment Variables dialog.
    - a. Right-click *My Computer* and select *Properties*.

- 
- b. Select [Advanced System Settings](#).
  - c. Click the [Advanced](#) tab.
  - d. Click [Environment Variables](#).
  - e. Select JAVA\_TOOL\_OPTIONS and click [Delete](#).
  - f. Click [OK](#) to exit all dialogs.
4. Shut down all Sybase® and SAP software and processes, and associated third-party processes, running on the installation target host.  
  
To verify that services are stopped, open the Services pane from Windows Control Panel.
  5. To accommodate SAP Mobile Platform internal communications, you may need to reconfigure intrusion detection/prevention systems (either hardware- or software-based).  
  
See *Intrusion Detection and Protection Requirements* in *Landscape Planning and Design*.
  6. Verify that the target host has Runtime versions of Microsoft Visual Studio C++ 2005, 2008, and 2010 installed.  
  
You can install these from the `\modules\redist` folder in the installer image.
  7. Verify that the target host has .NET Framework version 4.0 or higher installed.  
  
You can install this from the Microsoft Web site. Restart the computer after installing.

## 4.4 Running the Installer

Start the SAP Mobile Platform Server installer, accept the end-user license agreement and specify installation options, then launch and complete the installation process.

### Context

The installation path you specify below is referred to as `<SMP_HOME>` in the rest of these installation instructions.

### Procedure

1. Browse to the root directory of the SAP Mobile Platform installer, right-click the `setupAMD64.exe` file and select [Run as Administrator](#).

#### Note

The installer displays an `Initializing wizard...` message while it verifies the integrity of the installation image. It may take a few minutes for the first installer panel to appear.

2. On the installer welcome page, click [Next](#).
3. On the end-user license agreement page, select your country, accept the terms of the license agreement and click [Next](#).

4. Specify the absolute path to the installation location, which must be on a local drive on the target host.

The total length of the path must be 38 characters or less.

Directory names in the path can contain only:

- ASCII alphanumeric characters.
  - Underscore ( \_ ), hyphen ( - ), and period ( . ) characters. Two consecutive period characters are not allowed, and none of these characters may appear as the first character in a folder name.
5. Select **Production installation** as the installation type, unless you are installing a single-server development system.

### **i** Note

Clusters are not supported for development installations.

6. If you selected Production installation, on the database server configuration panel, specify your database information:
  - Use the default SAP SQL Anywhere database – select this for a development installation of SAP Mobile Platform.
  - Use another database you have already installed – select this for a production installation of SAP Mobile Platform, where you have installed your own database management software.
    - Select database type – select the specific database type you have installed: *SAP HANA*, *SAP ASE*, *SAP SQL Anywhere*, *DB2*, *Oracle (Service Name)*, *Oracle (SID)*, or *Microsoft SQL Server*.
    - Host name – the fully qualified domain name or static IP address of the database server. For Microsoft SQL Server installed with a custom instance name, enter **<host\_name \instance\_name>**.
  - Port number – the listening port of the database server. Default values:
    - SAP HANA – 30015 (formed by concatenating "3" plus the two-digit HANA instance number plus "15")
    - SAP ASE – 5000
    - SAP SQL Anywhere – 2639
    - DB2 – 50000
    - Oracle – 1521
    - Microsoft SQL Server – 1433
  - Login – enter **gomobile**, or the new user name if you changed it from the default.
  - Password – enter **secret**, or the new user password if you changed it from the default.
  - Schema name (SAP HANA), Database name (SAP ASE or DB2, or Microsoft SQL Server), Service name (Oracle accessed by service name), or SID (Oracle accessed by SID) – enter **smp3**, or the new database name, if you changed it from the default.
    - SAP HANA schema name defaults to the SAP HANA user name that installed the SAP Mobile Platform database. You can change that here on the first server installation. When installing additional server nodes in a cluster, you must match the schema name specified on the first node.
    - Oracle service name is the TNS alias used for a remote connection.
    - Oracle SID is a name that uniquely identifies the database instance on the database server.
  - Path to ... JDBC driver – (Oracle and Microsoft SQL Server only) enter the fully qualified path, including the JAR file name, to the type 4 Oracle JDBC driver.

If the installer displays a `Cannot connect to database` error:

1. Verify that the database server is running.  
If it is not running, start it, then click [Retry](#) in the message box, and click [Next](#).
  2. If the database server is running, check all the values entered on the database server configuration panel.  
If any are incorrect, click [Retry](#) in the message box, correct the entries, and click [Next](#) on the database server configuration panel.
  3. If the database server is running and all entries on the database server configuration panel appear to be correct, check the log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log`.
    1. Examine the messages in the log file, starting at the end and working backward, to find more information about the database connection failure.
    2. Correct any problems logged.
    3. Return to the database server configuration panel and click [Retry](#) in the message box, and click [Next](#).
7. Enter admin user credentials for your SAP Mobile Platform installation.

All these entries are case-sensitive.

- Keystore password – the password that will be required to access the keystore, where SAP Mobile Platform Server stores certificates and private keys.

#### Caution

You must match exactly the keystore password you enter here in each additional server node you install in a cluster.

- Admin user name – the admin user who will manage SAP Mobile Platform through the Management Cockpit.
- Admin password – the password for the admin user.

For both the admin password and the keystore password, only alphabetic and numeric characters, space, period, colon, dash, and hyphen are allowed. The following characters are not allowed: `! ? , ; " ' ` + * ^ / \ | = ~ < > @ # $ % & ( ) [ ] { }`

8. Specify the port numbers to use for the SAP Mobile Platform Server HTTP and HTTPS communication ports and click [Next](#).
9. Enter the Windows account information.

Set the *Start SAP Mobile Platform Server service automatically when Windows starts up* check box as desired to control whether SAP Mobile Platform Server service starts after each Windows start-up.

You can change the Windows account user name, `smpServiceUser`, to any valid name you choose. If the account you specify already exists, you must enter the current password. If the account does not exist, the installer tries to create it with the password you specify.

#### Note

If you get an error message:

- Beginning with,  
Failed to create a Windows User account `smpServiceUser`...  
Click [Next](#) to retry or you can create the account manually. See *Setting Up a User Account for the SAP Mobile Platform Windows Service in Administrator*. After the account is created manually, click [Next](#) to continue.



- Beginning with,  
Failed to create Windows service SAPSMPTTestUserLogonService...  
Check the log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log` and resolve any issues.
- Beginning with,  
Failed to start SAPSMPTTestUserLogonService service...  
Click [Retry](#) to try to set the service LOGON permission again or click [Proceed](#) to continue.  
If you click [Proceed](#), the server's Windows service cannot be started after installation until its LOGON permission has been properly set. See troubleshooting topic, [SAPSMPTTestUserLogonService Fails \[page 62\]](#).

10. On the summary information page, click [Install](#).
11. (Optional) To launch the MBO Runtime installer when the SAP Mobile Platform Server installer closes:
  - a. Select the check box to enable launching the MBO Runtime installer.
  - b. Enter or browse to the complete path to the location of the .zip file for the MBO Runtime installer.
12. Click [Finish](#).

## 4.5 Verifying the Installation

Check for errors in the installation logs, then verify that you can start the server and log in to Management Cockpit.

### Procedure

1. Check the installation log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log`.  
`<SMP_HOME>` is the installation location you specified (the default is `C:\SAP\MobilePlatform<XX>`).  
A search for "error" should not find anything.
2. Open the Services panel from Windows Control Panel. If SAP Mobile Platform Server service is not started, verify that you can start it manually.  
  
Check the server log at `<SMP_HOME>\Server\log\<host_name>-smp-server.log`. The server has not fully started until this line appears in the server log:  
  

`The SMP server has initialized and is ready.`
3. From Windows, select **Start > (All) Programs > SAP Mobile Server 3.0 > Management Cockpit**.  
Ignore any "untrusted certificate" errors displayed.

---

## Next Steps

|                                                 |                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installing only SAP Mobile Platform             | <ul style="list-style-type: none"><li>• If this installer run completes your SAP Mobile Platform landscape, go on to <i>Postinstallation Landscape Setup</i> in the 3.0 SP08 <i>Administrator</i> document.</li><li>• If you need to install additional SAP Mobile Platform Server nodes, see <i>Adding Cluster Nodes</i>.</li></ul> |
| Installing MBO Runtime with SAP Mobile Platform | In the SAP Mobile Platform document where you started, <i>Installation: SAP Mobile Platform Server for Windows</i> or <i>Upgrade: SAP Mobile Platform Server for Windows</i> , continue with the next task in the task flow topic for your landscape design.                                                                         |

## 5 Adding Cluster Nodes

After installing a production SAP Mobile Platform Server on one system, you can use the same installer to add nodes to create a cluster in which all SAP Mobile Platform Servers use the original external custom database.

### Context

#### Note

All nodes added to a cluster use the same communication port numbers specified for the first server that was installed in the cluster. Make sure these port numbers are available on the node where you are installing the additional SAP Mobile Platform Server for the cluster.

1. [Preparing for Installation \[page 51\]](#)  
Ensure that the host on which you are installing SAP Mobile Platform is ready for you to begin the installation.
2. [Running the Installer \[page 52\]](#)  
Start the SAP Mobile Platform Server installer, accept the end-user license agreement, select Production Installation and provide database information needed to connect to the same external database used by the first SAP Mobile Platform Server that you installed.
3. [Verifying the Added Node \[page 55\]](#)  
Check for errors in the installation logs, then verify that you can start the server and log in to Management Cockpit.

### 5.1 Preparing for Installation

Ensure that the host on which you are installing SAP Mobile Platform is ready for you to begin the installation.

#### Procedure

1. Install the first SAP Mobile Platform Server, connected to an external production database.  
See [Installing SAP Mobile Platform Server \[page 20\]](#).
2. Verify that the server (SAP Mobile Platform Server service) is fully started by connecting to Management Cockpit on the first server that you installed in this cluster.
3. Verify that the installation target host meets minimum system requirements for all SAP Mobile Platform components you are installing.

See the SAP Product Availability Matrix (PAM) <https://support.sap.com/release-upgrade-maintenance/pam.html>. Click the *Enter the Product Availability Matrix* button, then search for *SAP Mobile Platform 3.0* (search box in upper right corner), and select either *SAP Mobile Platform 3.0* or *SAP Mobile Platform SDK 3.0*.

### Note

Access to PAM requires an SAP Service Marketplace login: <http://service.sap.com/request-user>

4. Verify that you have Administrator privileges on the installation target host.
5. Remove the JAVA\_TOOL\_OPTIONS environment variable.  
Check for JAVA\_TOOL\_OPTIONS in both User Variables and System Variables panes of the Environment Variables dialog.
  - a. Right-click *My Computer* and select *Properties*.
  - b. Select *Advanced System Settings*.
  - c. Click the *Advanced* tab.
  - d. Click *Environment Variables*.
  - e. Select JAVA\_TOOL\_OPTIONS and click *Delete*.
  - f. Click *OK* to exit all dialogs.

6. Shut down all Sybase® and SAP software and processes, and associated third-party processes, running on the installation target host.

To verify that services are stopped, open the Services pane from Windows Control Panel.

7. To accommodate SAP Mobile Platform internal communications, you may need to reconfigure intrusion detection/prevention systems (either hardware- or software-based).

See *Intrusion Detection and Protection Requirements* in *Landscape Design and Integration*.

8. Verify that the target host has Runtime versions of Microsoft Visual Studio C++ 2005, 2008, and 2010 installed.

You can install this from the `\modules\redist` folder in the installer image.

9. Verify that the target host has .NET Framework version 4.0 or higher installed.

You can install this from the Microsoft Web site. Restart the computer after installing.

## 5.2 Running the Installer

Start the SAP Mobile Platform Server installer, accept the end-user license agreement, select Production Installation and provide database information needed to connect to the same external database used by the first SAP Mobile Platform Server that you installed.

### Context

The installation path you specify below is referred to as `<SMP_HOME>` in the rest of these installation instructions.

## Procedure

1. Browse to the root directory of the SAP Mobile Platform installer, right-click the `setupAMD64.exe` file and select *Run as Administrator*.

### Note

The installer displays an `Initializing wizard...` message while it verifies the integrity of the installation image. It may take a few minutes for the first installer panel to appear.

2. On the installer welcome page, click *Next*.
3. On the end-user license agreement page, select your country, accept the terms of the license agreement and click *Next*.
4. Specify the absolute path to the installation location, which must be on a local drive on the target host.

The total length of the path must be 38 characters or less.

Directory names in the path can contain only:

- ASCII alphanumeric characters.
- Underscore ( `_` ), hyphen ( `-` ), and period ( `.` ) characters. Two consecutive period characters are not allowed, and none of these characters may appear as the first character in a folder name.

5. Select **Production installation** as the installation type.
6. On the database server configuration panel, specify the database information needed to connect to the external production database used by the first server installation.

If the installer displays a `Cannot connect to database error`:

1. Verify that the database server is running.  
If it is not running, start it, then click *Retry* in the message box, and click *Next*.
2. If the database server is running, check all the values entered on the database server configuration panel.  
If any are incorrect, click *Retry* in the message box, correct the entries, and click *Next* on the database server configuration panel.
3. If the database server is running and all entries on the database server configuration panel appear to be correct, check the log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log`.
  1. Examine the messages in the log file, starting at the end and working backward, to find more information about the database connection failure.
  2. Correct any problems logged.
  3. Return to the database server configuration panel and click *Retry* in the message box, and click *Next*.

If the installer displays a `Cannot connect to database error`:

1. Verify that the database server is running.  
If it is not running, start it, then click *Retry* in the message box, and click *Next*.
2. If the database server is running, check all the values entered on the database server configuration panel.  
If any are incorrect, click *Retry* in the message box, correct the entries, and click *Next* on the database server configuration panel.
3. If the database server is running and all entries on the database server configuration panel appear to be correct, check the log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log`.

1. Examine the messages in the log file, starting at the end and working backward, to find more information about the database connection failure.
  2. Correct any problems logged.
  3. Return to the database server configuration panel and click [Retry](#) in the message box, and click [Next](#).
7. Enter admin user credentials for your SAP Mobile Platform installation.

All these entries are case-sensitive.

- Keystore password – the password that will be required to access the keystore, where SAP Mobile Platform Server stores certificates and private keys.

### Caution

The keystore password you enter here must match exactly the keystore value you entered for the first server node in the cluster.

For the keystore password, only alphabetic and numeric characters, space, period, colon, dash, and hyphen are allowed. The following characters are not allowed: ! ? , ; " ' ` + \* ^ / \ | = ~ < > @ # \$ % & ( ) [ ] { }

8. Accept the port numbers to use for the SAP Mobile Platform Server HTTP and HTTPS communication ports and click [Next](#).

### Note

These port numbers were set when you installed the first server node in the cluster – you cannot change them now.

If any of these port numbers are not free, you must free them up before you can proceed with installation on this node.

9. Enter the Windows account information.

Set the [Start SAP Mobile Platform Server service automatically when Windows starts up](#) check box as desired to control whether SAP Mobile Platform Server service starts after each Windows start-up.

You can change the Windows account user name, `smpServiceUser`, to any valid name you choose. If the account you specify already exists, you must enter the current password. If the account does not exist, the installer tries to create it with the password you specify.

### Note

If you get an error message:

- Beginning with,  
Failed to create a Windows User account `smpServiceUser`...  
Click [Next](#) to retry or you can create the account manually. See *Setting Up a User Account for the SAP Mobile Platform Windows Service in Administrator*. After the account is created manually, click [Next](#) to continue.
- Beginning with,  
Failed to create Windows service `SAPSMPTTestUserLogonService`...  
Check the log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log` and resolve any issues.

- Beginning with,  
Failed to start SAPSMPTTestUserLogonService service...  
Click [Retry](#) to try to set the service LOGON permission again or click [Proceed](#) to continue.  
If you click [Proceed](#), the server's Windows service cannot be started after installation until its LOGON permission has been properly set. See troubleshooting topic, [SAPSMPTTestUserLogonService Fails \[page 62\]](#).

10. On the summary information page, click [Install](#).
11. (Optional) To launch the MBO Runtime installer when the SAP Mobile Platform Server installer closes:
  - a. Select the check box to enable launching the MBO Runtime installer.
  - b. Enter or browse to the complete path to the location of the .zip file for the MBO Runtime installer.
12. Click [Next](#) to launch the SAP Mobile Platform Server installation process.
13. Click [Finish](#).

## Next Steps

Proceed directly to the next task: [Verifying the Added Node \[page 55\]](#)

If you selected the option to launch the MBO Runtime installer, do not wait for that installer to open:

- Verify the SAP Mobile Platform Server installation before proceeding.
- When the MBO Runtime installer opens, do not proceed with that installation until you have verified the SAP Mobile Platform Server installation.

## 5.3 Verifying the Added Node

Check for errors in the installation logs, then verify that you can start the server and log in to Management Cockpit.

### Procedure

1. Check the installation log at `<SMP_HOME>\InstallLogs\SMPInstall<date-time>.log`.  
`<SMP_HOME>` is the installation location you specified (the default is `C:\SAP\MobilePlatform<XX>`).  
A search for "error" should not find anything.
2. Open the Services panel from Windows Control Panel. If SAP Mobile Platform Server service is not started, verify that you can start it manually.

Check the server log at `<SMP_HOME>\Server\log\<host_name>-smp-server.log`. The server has not fully started until this line appears in the server log:

```
The SMP server has initialized and is ready.
```

3. From Windows, select ► [Start](#) ► [\(All\) Programs](#) ► [SAP Mobile Server 3.0](#) ► [Management Cockpit](#) ►. Ignore any "untrusted certificate" errors displayed.
4. Verify that this server has been added to the cluster.
  - a. Navigate to the [Cluster](#) tab.
  - b. Verify that the node you just installed appears.  
Nodes are identified by host name.
  - c. Click the node to see additional information.

## Next Steps

|                                                 |                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installing only SAP Mobile Platform             | <ul style="list-style-type: none"> <li>• If this installer run completes your SAP Mobile Platform landscape, go on to <i>Postinstallation Landscape Setup</i> in the 3.0 SP08 <i>Administrator</i> document.</li> <li>• If you need to add more SAP Mobile Platform Server nodes to your cluster, continue with <a href="#">Adding Cluster Nodes [page 51]</a>.</li> </ul> |
| Installing MBO Runtime with SAP Mobile Platform | In the SAP Mobile Platform document where you started, <i>Installation: SAP Mobile Platform Server for Windows</i> or <i>Upgrade: SAP Mobile Platform Server for Windows</i> , continue with the next task in the task flow topic for your landscape design.                                                                                                               |



## 6 Uninstalling

Uninstall SAP Mobile Platform Servers before reinstalling them.

### Context

In an SAP Mobile Platform cluster, perform the first two tasks below on each server node to uninstall all SAP Mobile Platform Servers. You can uninstall the server nodes in any order. After all server nodes have been uninstalled, perform the third task below to uninstall the external database.

1. [Preparing to Uninstall \[page 57\]](#)  
Ensure that the host from which you are uninstalling SAP Mobile Platform Server is ready for the uninstallation.
2. [Running the Uninstaller \[page 58\]](#)  
Start the SAP Mobile Platform Server uninstaller through the Windows Start menu.
3. [Removing the External Production Database \[page 59\]](#)  
After uninstalling all SAP Mobile Platform Server nodes, you can archive the production database data and remove the database.

### 6.1 Preparing to Uninstall

Ensure that the host from which you are uninstalling SAP Mobile Platform Server is ready for the uninstallation.

### Context

#### Note

If you have been using an external production database, uninstalling SAP Mobile Platform Server leaves that database intact.

If you have been using the default embedded database in a development installation, uninstalling SAP Mobile Platform Server deletes it.

## Procedure

1. While SAP Mobile Platform Server is running, first uninstall any other SAP products that require SAP Mobile Platform, such as SAP Mobile Sales for SAP CRM.

See the product-specific *Installation Guide*.

2. Shut down all SAP software and processes, and associated third-party processes that are running on the host.

Open the Windows Services panel to confirm that the SAP Mobile Platform Server service is stopped. If it is started, stop it manually.

3. Move or copy any user-created files and log files that you want to keep, from the SAP Mobile Platform Server installation directories to another location.

If you have been using the default database in a development installation and you plan to reinstall SAP Mobile Platform Server, preserve data by backing up the SAP Mobile Platform Server databases.

With SAP Mobile Platform Server stopped, use operating system commands to copy the entire directory structure from `<SMP_HOME>\Server\db\sa\smp3\` to a backup location.

4. Prevent backups from interfering, by either excluding the existing SAP Mobile Platform Server installation directory from backup processes or by temporarily disabling them.
5. Prevent virus scans from interfering, by either excluding the existing SAP Mobile Platform Server installation directory from virus scans or by temporarily disabling them.

## 6.2 Running the Uninstaller

Start the SAP Mobile Platform Server uninstaller through the Windows Start menu.

### Procedure

1. From the Windows Start menu, select ► *(All) Programs* ► *SAP Mobile Platform 3.0* ► *Uninstall SAP Mobile Platform 3.0 SP08* .
2. On the welcome panel, click *Next*.
3. Review the summary information, then click *Uninstall*.
4. Click *Finish* when you see:

The InstallShield wizard has successfully uninstalled SAP Mobile Platform ...

5. Delete any folders and files remaining in the SAP Mobile Platform Server installation directory.

## Next Steps

If you are uninstalling a cluster, repeat this procedure, beginning with [Preparing to Uninstall \[page 57\]](#), until you have uninstalled all cluster nodes.

To remove the external production database as the last step in uninstalling SAP Mobile Platform, see [Removing the External Production Database \[page 59\]](#)

If you have installed SAP MBO Runtime Server components with your SAP Mobile Platform system, see the *Uninstalling* chapter in *Installation: MBO Runtime Server* for instructions to remove that system.

## 6.3 Removing the External Production Database

After uninstalling all SAP Mobile Platform Server nodes, you can archive the production database data and remove the database.

### Procedure

1. Verify that all nodes in the SAP Mobile Platform have been uninstalled.
2. Archive the data if you wish to retain it.
3. execute the appropriate command below to delete the SAP Mobile Platform database tables.
  - SAP HANA – drop the schema for SAP Mobile Platform, using either HANA Studio or DROP SCHEMA command.  
The default schema name is the SAP HANA user name that installed the SAP Mobile Platform database in SAP HANA.
  - SAP ASE – at the `isql` prompt (if you changed the default database name, replace `smp3` with the new name):

```
drop database smp3;
```

- DB2 – at DB2 prompt (if you changed the default database user name, replace `gomobile` with the new name):

```
drop schema gomobile;
```

- Oracle – at SQL\*Plus prompt (if you changed the default database user name, replace `gomobile` with the new name):

```
drop user gomobile cascade;
```

---

# 7 Troubleshooting

Review information about common problems that arise in the SAP Mobile Platform Runtime installation process.

For information about contacting SAP Technical Support, see [Issues Requiring Product Support \[page 71\]](#).

## 7.1 Quick Fixes to Simple Problems

Quick fixes are usually common, single-cause problems that you can solve with minimal overhead or additional support.

### Fix List

#### 7.1.1 Accessing Management Cockpit Displays Certificate Error

##### Problem

You cannot access Management Cockpit without seeing and ignoring a certificate error.

##### Workaround

Add the Management Cockpit certificate to Windows certificate store. See *Setting Up Browser Certificates for Management Cockpit in Administrator*

---

## 7.1.2 Installation Fails after Canceling Installation

### Problem

When you run the installer again after canceling the installation process, the installation fails with a message about files or folders, such as `sapjvm_7`, that already exist.

### Workaround

1. Cancel the installation.
2. Manually delete all files and folders under `<SMP_HOME>`, the installation directory you selected.
3. Restart the installer.

## 7.1.3 OSGI Bundle Exception on Initial Server Startup

### Problem

On initial startup of the server after installation, the following error displays in the server log:

```
ERROR org.osgi.framework.BundleException:
State change in progress for bundle "reference:file:webapps/sapui5/" by thread
"fs-watcher".
```

### Workaround

No workaround required: the server starts normally and server functions are not affected. This error does not display in the log on subsequent restarts.

---

## 7.1.4 SAPSMPTTestUserLogonService Fails

### Problem

When you enter information for the `smpServiceUser` Windows user account, the installer displays the error message, `Failed to start SAPSMPTTestUserLogonService service...` As a result, you cannot start SAP Mobile Platform Server.

### Workaround

If the Windows `smpServiceUser` account already existed, or the installer successfully created it, update the SAP Mobile Platform Server service property in Windows Control Manager. In the [Log On](#) tab, configure the service to log on and run with the `smpServiceUser` user account.

## 7.1.5 Server Fails to Start After Enabling Mobiliser Features

### Problem

If you perform tasks in this sequence, SAP Mobile Platform Server will not restart after you configure Mobiliser to work with the external database:

1. Set up an external database, skipping the procedure to configure that database to work with Mobiliser.
2. Install SAP Mobile Platform Server, connecting to that external database.
3. Enable Mobiliser-related features from Management Cockpit, in ► [Settings](#) ► [Features & Components](#) ►

At this point, SAP Mobile Platform Server cannot restart, because the Mobiliser tables are not installed if you skip that option in step 1 above.

### Workaround

If SAP Mobile Platform Server is working with an external database that was not configured to work with Mobiliser, follow this procedure to enable Mobiliser:

1. Go to the computer on which the external database for your SAP Mobile Platform installation is installed.

2. Get the installer image for the version of SAP Mobile Platform Server that you used to configure the external database before you installed SAP Mobile Platform.
  - If the installer image is still on that computer, you can use that.
  - Otherwise, see the link to *Acquiring the Installer* in "Related Information" below.
3. Under [Using an External Database \[page 21\]](#), perform all the tasks in the *Configuring <DBtype> to Support Mobiliser* topic for your external database.
4. If your external database has multiple instances to provide failover capability, perform the steps above on each database instance.
5. Stop and restart SAP Mobile Platform Server, on each server node in a cluster.

## 7.1.6 Server Node Does Not Join the Cluster

### Problem

While viewing the server log on a working node in the cluster, you see that the number of current addresses in the cluster is incorrect. For example, after adding a second node, the number of current addresses in the log still shows as 1:

```
Cluster node channel name: 'SERVERNAME-27525(bind_addr=192.168.1.100:55450) '
SMP Cluster: Current Addresses in cluster: 1. Addresses previously in cluster: 0
```

#### Note

You can view the log through Management Cockpit connected to a working node or in [<SMP\\_HOME>](#) \Server\log on the file system of a working node.

### Assess and Correct

Assess the root cause and take the appropriate corrective action.

| Root Cause                                                                                                        | Assessment                                          | Correction                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The node cannot be reached using the IPv4 network interface, which is the default for SAP Mobile Platform Server. | The node can be reached using IPv6 instead of IPv4. | In <a href="#">&lt;SMP_HOME&gt;</a> \Server\configuration\com.sap.mobile.platform.server.launcher\fixed-sys.properties, remove the following line: <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <pre>- Djava.net.preferIPv4Stack=true</pre> </div> |

| Root Cause                                                                                                                                                                                               | Assessment                                                                                                                                                                        | Correction                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                          |                                                                                                                                                                                   | <p><b>Note</b></p> <p>You must delete this line to comment it out.</p>                                                                                                                         |
| <p>SAP Mobile Platform Server is bound to an IP address that is not routed to a node in the cluster.</p> <p>The address that SAP Mobile Platform Server is bound to is shown in the log (bind_addr).</p> | <p>In some situations, such as when the node is connected to two or more networks that do not allow routing, you must specify the IP address that the cluster should bind to.</p> | <p>In <code>&lt;SMP_HOME&gt;\Server\configuration\com.sap.mobile.platform.server.launcher\fixed-sys.properties</code>, remove the following line:</p> <pre>java.net.preferIPv4Stack=true</pre> |

#### Note

Update `props.ini` on each node in the cluster. Restart each SAP Mobile Platform Server for the changes to take effect.

## 7.1.7 Server Node Does Not Start

### Problem

After installing or upgrading a node in the cluster, one or more of the server nodes does not start.

### Assess and Correct

Assess the root cause and take the appropriate corrective action.

| Root Cause                                                                          | Assessment                                                                                                                                                                                                                                       | Correction                                                                     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <p>The version of the server node is incompatible with the rest of the cluster.</p> | <p>On a server node that is not starting, review the <code>&lt;SMP_HOME&gt;\Server\log\osgi.log</code> for the following message:</p> <pre>The version of this server node (&lt;version number&gt;) is not compatible with the cluster you</pre> | <p>Upgrade the server node to a compatible version, then start the server.</p> |



| Root Cause                                                                                                                                                                                               | Assessment                                                                                                                                                                                                                                                          | Correction                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                          | are attempting to connect to. It must be one of [ <code>&lt;compatible version numbers&gt;</code> ].                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                 |
| The server node did not connect to the database.                                                                                                                                                         | On a server node that is not starting, review the <code>&lt;SMP_HOME&gt;\Server\log\osgi.log</code> for the following message:<br><br>Failed to connect to the database on startup. The following error was returned: <code>&lt;specific error message&gt;</code> . | Ensure the database is running and can be connected to from the server node. The specific error message may provide more specific information about the source of the problem, such as the server host cannot be connected to because of a network outage. The database logs may be used to determine database specific errors. |
| The server node key does not match the key used for the rest of the cluster.<br><br><b>Note</b><br>This problem may occur when you are installing a second node before the first node has been started.. | On a server node that is not starting, review the <code>&lt;SMP_HOME&gt;\Server\log\osgi.log</code> for the following message:<br><br>The key of this server node does not match the cluster you are attempting to connect to it.                                   | Uninstall SAP Mobile Platform Server on the node and then re-install it.                                                                                                                                                                                                                                                        |

## 7.1.8 Uninstalling Does Not Clean Database

### Problem

If you uninstall one or more instances of SAP Mobile Platform from a cluster, information about the uninstalled cluster members remains in the database.

### Workaround

- If you uninstall one node from a cluster, an administrator can manually delete its data from the database.
- If you uninstall all the cluster nodes, an administrator must either:
  - Delete all the tables in the schema to free the database, or
  - Create a new schema.

---

## 7.1.9 Incorrect Installation Error Message

### Problem

After you complete or cancel the installation process, you see this message from the Windows Program Compatibility Assistant: *This program might not have installed correctly.*

### Workaround

1. In the Program Compatibility Assistant window where the message appears, click [This program installed correctly](#) to close the window without further action.
2. If you see this message after canceling the installation, it is probably because the UAC is enabled. To disable UAC:
  1. Access the Control Panel option that manages User Account Control on your version of Windows.
  2. Set the user account to never be notified about changes to your computer.Reenable UAC after completing this installation.
3. If appropriate, restart the installer when you are ready.

## 7.2 Issues Requiring Root Cause Analysis

Problems that have multiple solutions may require you to investigate an identified incident, problem, concern, or nonconformity. Try to understand the fundamental or underlying causes of the situation and correct them right, thereby preventing reoccurrence of the same issue.

### 7.2.1 Cannot Access Management Cockpit

After successfully installing SAP Mobile Platform Server, you cannot access Management Cockpit in a browser window.

#### [Detect \[page 67\]](#)

After installing SAP Mobile Platform Server, when you try to access Management Cockpit, your Web browser displays an error message.

#### [Assess \[page 68\]](#)

You may not be able to access Management Cockpit if the server is not started, the URL is incorrect, or the browser is not supported.

#### [Correct Server Not Started \[page 69\]](#)

If your assessment confirms this root cause, start the server.

[Correct Management Cockpit URL \[page 70\]](#)

If your assessment confirms the root cause, correct the URL used to access Management Cockpit.

[Correct Browser Version \[page 70\]](#)

If your assessment confirms this root cause, install a supported browser.

[Correct Browser Proxy Settings \[page 71\]](#)

If your assessment confirms this root cause, correct browser proxy settings.

## 7.2.1.1 Detect

After installing SAP Mobile Platform Server, when you try to access Management Cockpit, your Web browser displays an error message.

### Problem Overview

The error message varies, depending on the browser you are using and the underlying cause.

**Environment** this can occur with SAP Mobile Platform Server installed on any supported server operating system, when attempting to access Management Cockpit remotely or from the same system where the server is installed.

**Notable symptoms** the admin ID and password prompt never appears.

**Triage characteristics** use severity and complexity characteristics to determine the IT resources you may need to assign to remediate this problem.

Table 6:

| Attribute  | Classification                                               |
|------------|--------------------------------------------------------------|
| Severity   | High. Major system administration functions are unavailable. |
| Complexity | Simple to assess and to resolve.                             |

**Next:** Assess the issue to determine your root cause.

## 7.2.1.2 Assess

You may not be able to access Management Cockpit if the server is not started, the URL is incorrect, or the browser is not supported.

### Root Cause Diagnostic Assessment

Check the most likely causes first. You may have to resolve more than one root cause.

Table 7: Diagnostic Assessment and Correction Summary

| Root Cause                                          | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Correction                                                                                                                                          |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| (Likely) SAP Mobile Platform Server is not started. | <ol style="list-style-type: none"><li>1. Log in to the desktop of the computer where SAP Mobile Platform Server is installed.</li><li>2. Check the server start-up state:<ol style="list-style-type: none"><li>1. In Windows Services Control Panel, check status of SAP Mobile Platform Server service.</li><li>2. If SAP Mobile Platform Server is not started, SAP Mobile Platform Server is not started.</li></ol></li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>If server is not started, see <a href="#">Correct Server Not Started [page 69]</a>.</p> <p>If server is started, assess the next root cause.</p> |
| (Possible) Management Cockpit URL is incorrect.     | <p>If you used the desktop shortcut or the Windows Start menu to access Management Cockpit on the server where SAP Mobile Platform Server is installed, the URL is predefined. Continue with the next assessment.</p> <p>If you manually entered the URL to access Management Cockpit remotely, verify the correct URL for Management Cockpit:</p> <ol style="list-style-type: none"><li>1. Log in to the desktop of the computer where SAP Mobile Platform Server is installed.</li><li>2. Start Management Cockpit through the Windows Start menu or the desktop shortcut.</li><li>3.<ol style="list-style-type: none"><li>1. Copy the URL from the browser window where SAP Mobile Platform Server opened.</li><li>2. Use email, chat, or clipboard to make the copied URL available on the computer from which you want to access Management Cockpit remotely.</li></ol></li><li>4. Log in to the desktop of the computer from which you want to access Management Cockpit remotely.</li><li>5. Compare the URL you copied from the server where SAP Mobile Platform Server is installed with the URL you were using to access Management Cockpit.</li></ol> | <p>If the URLs are different, see <a href="#">Correct Management Cockpit URL [page 70]</a>.</p> <p>If not, assess the next root cause.</p>          |

| Root Cause                                             | Assessment                                                                                                                                                                                                                                       | Correction                                                                                                                                                                             |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Possible) Browser version is not supported.           | See <a href="https://support.sap.com/release-upgrade-maintenance/pam.html">https://support.sap.com/release-upgrade-maintenance/pam.html</a> for the correct browser versions.<br><br>If your browser version is not listed, it is not supported. | If the browser version you are using is not supported, see <a href="#">Correct Browser Version [page 70]</a> .<br><br>If the browser version is supported, assess the next root cause. |
| (Possible) Browser proxy settings prevent access.      | Even if your browser does not display an error message indicating that proxy settings are blocking access to the Management Cockpit URL, check with your company's IT support to determine whether browser proxy settings need to be changed.    | If your company's IT support determines that your browser proxy settings are preventing access, see <a href="#">Correct Browser Proxy Settings [page 71]</a> .                         |
| (Unknown) None of the root causes have been validated. | Check other knowledge and support assets on SAP Service Marketplace. If no other causes are documented by Product Support, collect the data and outcomes of this assessment.                                                                     | Assistance required. Create a help ticket with Product Support on SAP Service Marketplace.                                                                                             |

## 7.2.1.3 Correct Server Not Started

If your assessment confirms this root cause, start the server.

### Correct

1. Log in to the desktop of the computer where SAP Mobile Platform Server is installed.
2. Start the server using any of these methods:
  - Desktop shortcut – double-click the [Start SAP Mobile Platform Server](#) icon on the Windows desktop.
  - Windows Start menu – select ► [Start](#) ► (All) Programs ► [SAP Mobile Platform Server 3.0](#) ► [Start SAP Mobile Platform Server](#) ►.
  - Windows Services Control Panel – start the [SAP Mobile Platform Server](#) service.

Check the server log at `<SMP_HOME>\Server\log\<host_name>-smp-server.log`. The server has not fully started until this line appears in the server log:

```
The SMP server has initialized and is ready.
```

### Validate

1. Try again to access Management Cockpit.
2. If the login screen for Management Cockpit still does not appear, assess the next root cause.

---

## 7.2.1.4 Correct Management Cockpit URL

If your assessment confirms the root cause, correct the URL used to access Management Cockpit.

### Correct

1. Select and copy the URL you copied from the Management Cockpit's browser window on the server where SAP Mobile Platform Server is installed.
2. Paste the URL into your browser's address bar and press [Enter](#).

### Validate

If the login screen for Management Cockpit still does not appear, assess the next root cause.

## 7.2.1.5 Correct Browser Version

If your assessment confirms this root cause, install a supported browser.

### Correct

1. Select a supported browser version from those listed in <https://support.sap.com/release-upgrade-maintenance/pam.html>.
2. Download that browser version from the vendor's Web site and install it on the computer from which you want to access Management Cockpit.

### Validate

1. Try again to access Management Cockpit.
2. If the login screen for Management Cockpit still does not appear, assess the next root cause.

## 7.2.1.6 Correct Browser Proxy Settings

If your assessment confirms this root cause, correct browser proxy settings.

### Correct

1. Consult with your company's IT support to determine the correct browser proxy settings.
2. Change browser proxy settings to match settings provided by your company's IT support..

### Validate

1. Try again to access Management Cockpit.
2. If the login screen for Management Cockpit still does not appear, assess the next root cause.

## 7.3 Issues Requiring Product Support


Your SAP support ID gives you access to enterprise-level incident support as part of your support plan on SAP Service Marketplace.

Product Support can help you resolve new undocumented incidents with software installation, start-up, and overall use, as well as providing diagnostic and troubleshooting assistance for known problems with a new or undocumented cause.

### 7.3.1 Creating an Incident on SAP Service Marketplace


If you cannot resolve problems with the troubleshooting documentation for SAP Mobile Platform, go to SAP Service Marketplace for additional help.

Use SAP Service Marketplace to create an incident message for Product Support. Keywords from this message return related articles from the Knowledge Base. Before you submit a message, review these articles to see if they resolve your problem.

1. Go to <http://service.sap.com/message> .
2. Create a message using the wizard.

#### Note

You must know the component ID for SAP Mobile Platform to return the correct scope of Knowledge Base Articles and to correctly route the message to Product Support. On-premise installations of SAP

Mobile Platform use a different ID than cloud instances. See Knowledge Base Article [1915061- How to Choose a Component for SAP Mobile Platform 3.x in Service Marketplace](#)  .

3. Once the message is processed, you receive an e-mail notification of the solution.

## 7.3.2 Product Support Engagement Requirements

If you use SAP Service Marketplace to engage with Product Support, you must meet certain requirements.

### Service Marketplace Case Creation Requirements

Be prepared to provide:

- A valid installation number for SAP Mobile Platform
- A valid service contract with SAP
- A valid system ID (S-User ID)
- An enabled NetViewer connection.

### SAP Mobile Platform Incident Requirements

- Configure your logs to an appropriate level for your issue. Product Support requires details from one or more of the system logs.
- Capture these basic incident details to help Product Support analyze the problem, and determine any next steps:
  - Environment summary: product version, back end, client type (device and OS), proxy connections. These details help isolate component that is causing the failure. If you have an architecture diagram, share it with SAP.
  - Problem description: what were the actions preceded the incident. Capture all details that allow Product Support to reproduce the issue.
- Locate the server version in the `SMP_HOME\Server\version.properties` file.



## 8 System Deployment Reference

Reference information that supports SAP Mobile Platform system deployment tasks.

### 8.1 Port Number Reference

Components of SAP Mobile Platform rely on communication ports for inter-process coordination, data transfer, and administrative access.

This section lists the default port numbers that SAP Mobile Platform Server uses for various purposes. Users may specify different port numbers during installation. If a default port number, or a user-specified port number is not available when the SAP Mobile Platform Server runs, the next higher port number available is used.

The topics in this section also explain how to determine the port numbers currently being used, and how to change those port numbers.

[HTTP/HTTPS Port Number Reference \[page 73\]](#)

HTTP and HTTPS ports, default assignments, and protocols.

[TCP Port Number Reference \[page 74\]](#)

TCP ports, default assignments, and protocols.

#### 8.1.1 HTTP/HTTPS Port Number Reference

HTTP and HTTPS ports, default assignments, and protocols.

Table 8:

| Type                                                  | Default       | Protocol | Where Configured                                                                                                                 |
|-------------------------------------------------------|---------------|----------|----------------------------------------------------------------------------------------------------------------------------------|
| Client communications, unsecured                      | 8080          | HTTP     | In Management Cockpit, select ► <a href="#">Settings</a> ► <a href="#">Connectors</a> ►<br>Setting: HTTP Client Connector, Port  |
| Client communications with one-way SSL authentication | 8081 (secure) | HTTPS    | In Management Cockpit, select ► <a href="#">Settings</a> ► <a href="#">Connectors</a> ►<br>Setting: HTTPS Client Connector, Port |

| Type                                                                                                                            | Default       | Protocol | Where Configured                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client communications with mutual SSL authentication                                                                            | 8082 (secure) | HTTPS    | In Management Cockpit, select the <a href="#">SETTINGS</a> tab, then select <a href="#">CONNECTORS</a><br><br>Setting: Mutual SSL Authentication Client Connector, Port |
| Administration port, Management Cockpit, and Kapsel command line interface (CLI) communications with one-way SSL authentication | 8083 (secure) | HTTPS    | In Management Cockpit, select ► <a href="#">Settings</a> ► <a href="#">Connectors</a> ►<br><br>Setting: HTTPS Admin Connector, Port                                     |

### **i** Note

Keystore certificates are used for SSL authentication of SAP Mobile Platform Server communication ports.

## 8.1.2 TCP Port Number Reference

TCP ports, default assignments, and protocols.

Table 9:

| Type | Default | Protocol | Where Configured                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------|---------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JMX  | 1717    | TCP      | File: <SMP_HOME>\Server\config_master\com.sap.ljs.commandline.parameters\ljs.properties<br><br>Setting: jmxremote.port=1717<br><br>File: <SMP_HOME>\Server\config_master\com.sap.mobile.platform.server.foundation.security.jmx\com.sap.mobile.platform.server.foundation.security.jmx.properties<br><br>Settings:<br><ul style="list-style-type: none"> <li>jmxPort=1717</li> <li>serviceUrl=service:jmx:rmi:///127.0.0.1:1717/jndi/rmi:///127.0.0.1:1717/jmxrmi</li> </ul> |

| Type                                                                                  | Default                  | Protocol | Where Configured                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------|--------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAP SQL Anywhere database (only when used as the SAP Mobile Platform Server database) | 2639<br>(localhost only) | TCP      | Setting: <code>-x tcpip (port=2639) ; LocalOnly=YES</code><br><br><div> <b>i Note</b><br/>           If you change the port number, you must also update the connection-pool <code>&lt;port&gt;</code> values in these files:           <ul style="list-style-type: none"> <li><code>&lt;SMP_HOME&gt;\config_master\connection_data\connection.properties</code> – update this line:               <pre>javax.persistence.jdbc.url=jdbc:sybase:Tds:localhost:&lt;port&gt;/?servicename=smp3</pre> </li> <li><code>&lt;SMP_HOME&gt;\config_master\com.sybase365.mobiliser.framework.persistence.jdbc.bonecp.pool\pool.properties</code> – update this line:               <pre>jdbcUrl=jdbc:sybase:Tds:localhost:&lt;port&gt;/smp3</pre> </li> </ul> </div> |
| OSGi console                                                                          | 2401<br>(localhost only) | TCP      | File: <code>&lt;SMP_HOME&gt;\Server\props.ini</code><br>Setting: <code>-console localhost:2401</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mobiliser TCP                                                                         | 8088                     | TCP      | File: <code>&lt;SMP_HOME&gt;\Server\config_master\com.sybase365.mobiliser.framework.gateway.tcp\com.sybase365.mobiliser.framework.gateway.tcp.properties</code><br>Setting: <code>port=8088</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## 8.2 Installation Directories

File organization of your SAP Mobile Platform Server installation.

The table below shows the top-level directories created under `<SMP_HOME>` when you install SAP Mobile Platform Server. `<SMP_HOME>` is the installation location you specified (the default is `C:\SAP\MobilePlatform<XX>`).

Table 10: SAP Mobile Platform Installation Subdirectories

| Directory             | Description                 |
|-----------------------|-----------------------------|
| <code>_smpj vm</code> | JVM used by the uninstaller |

| Directory          | Description                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------|
| InstallLogs        | Log files created each time the SAP Mobile Platform Server installer is used. Use these logs to troubleshoot installer issues. |
| MR30               | MBO Runtime files, present only if you have installed MBO Runtime on the same server                                           |
| sapjvm7            | SAP Java virtual machine files used by SAP Mobile Platform Server                                                              |
| Server             | SAP Mobile Platform Server components                                                                                          |
| ThirdParty         | License terms of third-party components included in SAP Mobile Platform                                                        |
| Uninstaller        | Uninstallers for SAP Mobile Platform Server components                                                                         |
| Uninstaller\Server | SAP Mobile Platform Server uninstaller                                                                                         |
| Util               | Utilities used by the SAP Mobile Platform Server installer                                                                     |

## 8.3 Service Reference

Services are installed on the SAP Mobile Platform Server host to manage and coordinate component processes.

Table 11:

| Service                    | Description                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAP Mobile Platform Server | Top-level SAP Mobile Platform Server process. Coordinates other processes that handle interactions with back-end services, supports messaging and synchronization service to mobile clients, and provides SAP Mobile Platform system management facilities. |

## 8.4 Starting and Stopping SAP Mobile Platform Server on Windows

You can start and stop SAP Mobile Platform Server on Windows in different ways.

### **i** Note

If you are using a custom database with SAP Mobile Platform, starting and stopping SAP Mobile Platform Server has no effect on the database. Only the default SAP SQL Anywhere database is automatically stopped and started in sync with SAP Mobile Platform Server.

## Starting SAP Mobile Platform Server

Use any of these methods to start SAP Mobile Platform Server:

- Desktop shortcut – double-click the *Start SAP Mobile Platform Server* icon on the Windows desktop.
- Windows Start menu – select ► *Start* ► *(All) Programs* ► *SAP Mobile Platform Server 3.0* ► *Start SAP Mobile Platform Server* ►.
- Windows Services Control Panel – start the *SAP Mobile Platform Server* service.

Server start-up may take several minutes.

Check the server log at `<SMP_HOME>\Server\log\<host_name>-smp-server.log`. The server has not fully started until this line appears in the server log:

```
The SMP server has initialized and is ready.
```

## Stopping SAP Mobile Platform Server

Use any of these methods to stop SAP Mobile Platform Server:

- Desktop shortcut – double-click the *Stop SAP Mobile Platform Server* icon on the Windows desktop.
- Windows Start menu – select ► *Start* ► *(All) Programs* ► *SAP Mobile Platform 3.0* ► *Stop SAP Mobile Platform Server* ►.
- Windows Services Control Panel – stop the *SAP Mobile Platform Server* service.

## 8.5 Starting and Stopping Management Cockpit on Windows

You can start and stop Management Cockpit in different ways.

### Note

SAP Mobile Platform Server must be started before you can start Management Cockpit.

## Starting Management Cockpit from Any Computer on the Network

On any computer on the network, in a supported browser, enter:

```
https://<host_name>:<https_admin_port>/Admin/
```

then log in with the administrative user name and password.

## Starting Management Cockpit on the Server Host

On the server host, you can also use any of these options to start Management Cockpit, then log in with the administrative user name and password:

- Desktop icon – double-click the *SAP Management Cockpit* icon on the Windows desktop.
- Windows Start menu – select ► *Start* ► *(All) Programs* ► *SAP Mobile Platform Server <version>* ► *Management Cockpit* ►.
- Web browser – in a supported browser, enter:

```
https://localhost:<https_admin_port>/Admin/
```

### Note

In a clustered server environment, some Management Cockpit activities need to be done on each node in the cluster. Connect to each node through a browser, using the host name and port for the node to which you want to connect.

## Stopping Management Cockpit

To stop Management Cockpit, click the *Logout* icon, in the upper right corner.

---

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