

SAP Landscape Management 3.0, Standard Edition, Installation Guide



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1 Document History

Before you start the implementation, make sure you have the latest version of this document.

The following table provides an overview of the most important document changes.

Table 1:

Version	Date	Description
1.00	2016-11-07	Initial version

2 Introduction

This document describes the installation of SAP Landscape Management 3.0 standard edition.

Note

If you want to migrate SAP Landscape Management 3.0, standard edition, to SAP Landscape Management 3.0, enterprise edition, refer to the Installation Guide for SAP Landscape Management 3.0, enterprise edition.

The software is an add-on to SAP NetWeaver 7.5; therefore, you must have installed an SAP NetWeaver Application Server for Java (SAP NetWeaver AS for Java).

The recommended minimum SAP NetWeaver Support Package stack is SAP NetWeaver Release 7.50 Support Package 04.

The SAP NetWeaver 7.5 installation guide also applies to SAP Landscape Management. For more information, see SAP Service Marketplace at <http://service.sap.com/instguidesnw>.

2.1 About this Document

This guide details the steps necessary to install SAP Landscape Management after initial installation of SAP NetWeaver Application Server for Java.

The functionality of the software is explained at <https://go.sap.com/product/technology-platform/landscape-management.html>.

2.2 Key Features

- Intersystem dependency framework
- Single system and mass operations (for example, starting and stopping)
- Relocating systems from one host to another
- User-configurable dashboards
- Scheduling operation and provisioning templates
- Application server (un-)installation
- Diagnostics Agent (un-)installation
- Custom instances, operations, and hooks

3 Before You Start

This section provides information about SAP Notes for the installation and information that is available on SAP Service Marketplace.

3.1 SAP Notes for the Installation

You **must** read the following SAP Notes **before** you start the installation. These SAP Notes contain the most recent information on the installation, as well as corrections to the installation documentation.

Make sure that you have the up-to-date version of each SAP Note, which you can find on SAP Support Portal at <http://support.sap.com/notes>.




Table 2:

SAP Note Number	Title	Description
2350252	SAP Landscape Management 3.0	Contains the latest information about supported IT infrastructure elements.
1709155	System Provisioning with SAP Landscape Management	Contains the latest information about system provisioning with SAP Landscape Management.
1703029	NoSuchMethodError in XSSEncoder after upgrade	Contains information about needed patch levels for your individual support package.
1781171	ClickJacking vulnerability in WebDynpro Java	Contains information to avoid clickjacking vulnerability in WebDynpro Java.

3.2 Information Available on SAP Service Marketplace

Table 3:

Description	Internet Address	Title
Released platforms	http://service.sap.com/platforms	-
System sizing	http://service.sap.com/sizing	Quick Sizer tool

Description	Internet Address	Title
Front-end installation	http://service.sap.com/instguides 	Front End Installation Guide
Security	http://service.sap.com/security 	-
Technical documentation in SAP NetWeaver	http://service.sap.com/guidefinder 	-

4 Planning

This section provides an overview of SAP Landscape Management, its software units, and its scenarios from a technical perspective, thus helping you to design your system landscape.

This section discusses the overall technical implementation of SAP Landscape Management, rather than its subordinate components. This means that additional software dependencies might exist without being mentioned explicitly.

4.1 System Landscape Overview

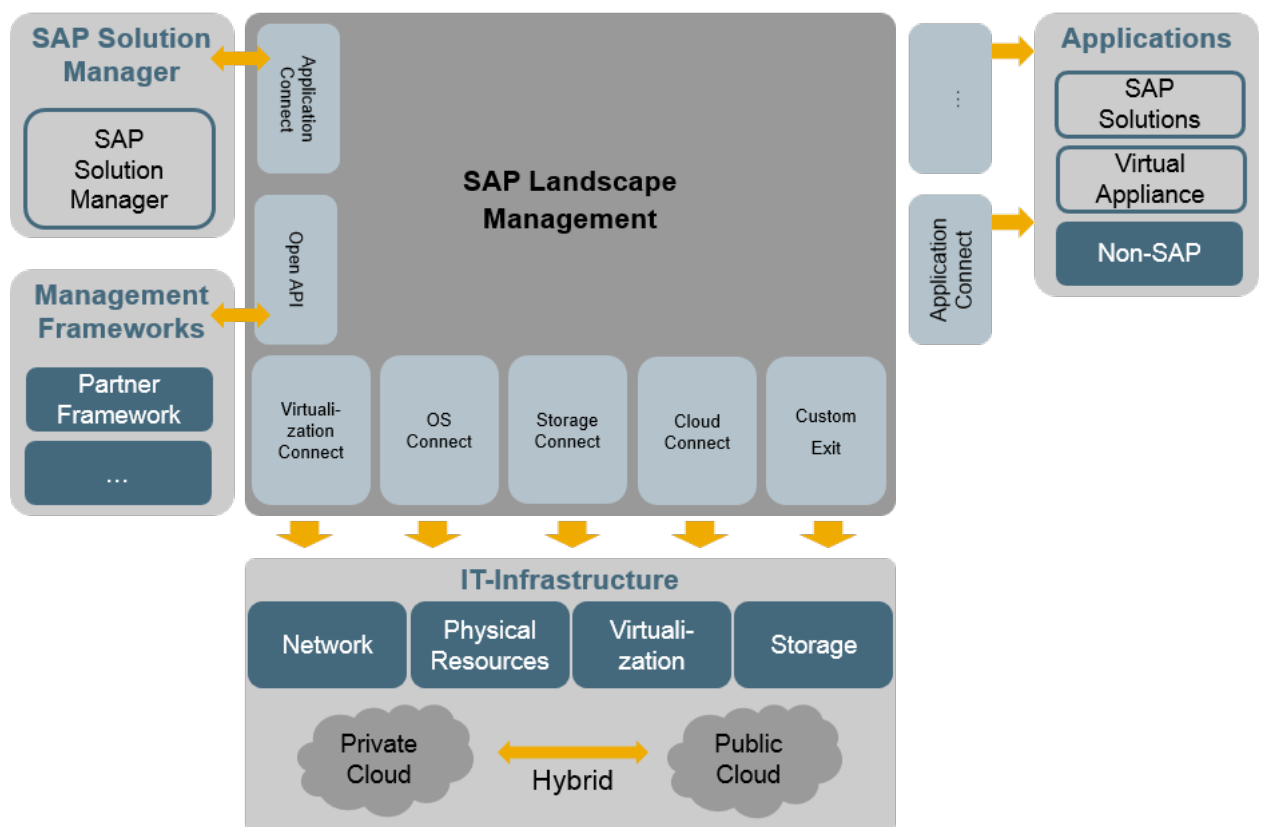


Figure 1: System Landscape Overview

The SAP Landscape Management landscape is made up of the following building blocks:

- **Managing system**
The managing system is a virtual or physical server, installed with SAP Landscape Management or 7.4 for Java, where the SAP Landscape Management SCA files are deployed. It initiates the actions such as starting, stopping, and relocation of application instances.
- **Managed SAP systems**

An SAP system consists of at least a database, a central instance, and a set of application servers running on one or more hosts (physical or virtual servers).

We differentiate between the following installation variants:

- Adaptive enabled systems must be stored on central storage. To distribute the different parts of an SAP system on central storage, you use NAS (Network Attached Storage) or SAN (Storage Area Network). By using virtual hostnames for the SAP and database instances, you ensure that instances can be relocated from one operating system host to another.
- Virtualization based and traditionally installed systems are installed within a virtual machine (VM) and the corresponding virtualization manager is configured within SAP Landscape Management.
- Infrastructure components
 - Central storage management

The central storage management is used to create snapshots or copies of file systems. Leveraging storage technologies enables SAP Landscape Management to create copies of very large file systems very quickly and with a minimum of overhead. SAP Landscape Management relies on a central storage manager that can manage multiple central storage systems; SAP Landscape Management does not directly manage the individual storage systems.
 - Virtualization management

Virtualization management is used by SAP Landscape Management to start, stop, and provision virtual hosts. This enables SAP Landscape Management to create new hosts when they are needed.
- Additional components
 - System Rename

The software provisioning manager renames copied or refreshed systems. This includes changing the system ID, host name, and instance number from the source system to the target system. For this, a central share with the system rename functionality is mounted, and then the system rename is executed. The system rename is provided in a standalone tool and is not integrated in the SAP Landscape Management user interface.

For more information about system rename components, see the system rename guides on SAP Service Marketplace at <http://service.sap.com/instlvm>.

For more information about the software provisioning manager, see SAP Help Portal at <http://help.sap.com/sitoolset>.

For more information about supported storage providers, infrastructure components, operating systems and platforms, and database systems and versions, see SAP Note [2350252](#).

Example

The following example describes how the system landscape can be installed.

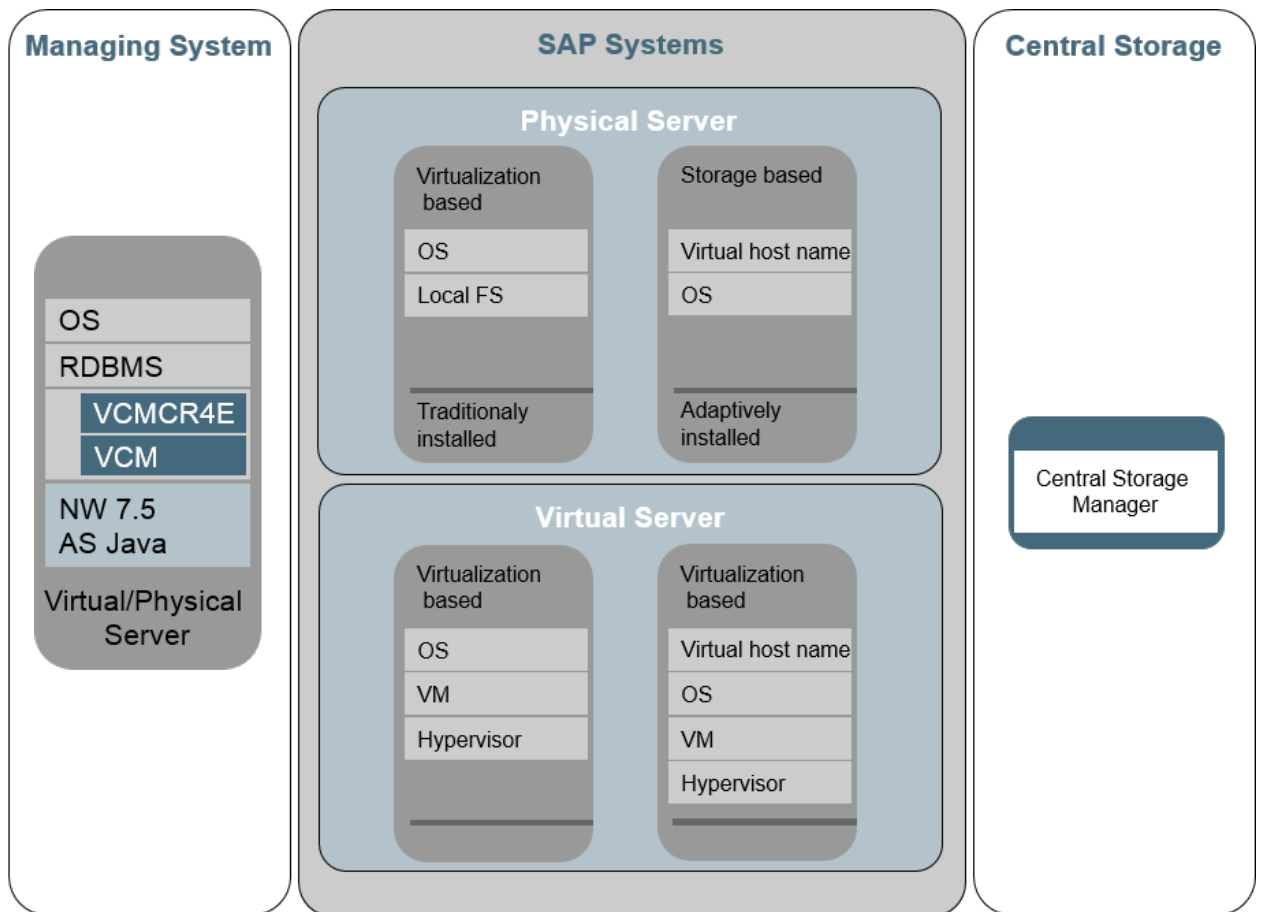


Figure 2: Installation Variant

5 Preparation

1. Install SAP NetWeaver Application Server 7.5 for Java.
The recommended minimum SAP NetWeaver Support Package stacks are:
 - SAP NetWeaver Release 7.50 Support Package 04Lower support package stacks, are not supported.
2. Obtain the following SCA files from SAP Support Portal at <https://launchpad.support.sap.com/#/softwarecenter> ► ► *Installations and Upgrades* ► *By Alphabetical Index (A-Z)* ► *L* ► *SAP LANDSC MGT STD* ► *SAP LANDSC MGT STD 3.0* ► *DOWNLOADS* ► *Installation* ►.

Table 4:

SCA File	Description
VCMCR4E	This SCA file contains open source and third party libraries required to use the search functionality or to generate and display reports in SAP Landscape Management.
VCM	This SCA file contains all functional coding and is the main component of SAP Landscape Management.

3. To deploy the SCA files to SAP NetWeaver AS for Java, use the installation tool Software Update Manager (SUM).
SUM is part of the Software Logistics Toolset delivery and available for download at: <https://launchpad.support.sap.com/#/softwarecenter> ► ► *Installations & Upgrades* ► *By Alphabetical Index (A-Z)* ► *S* ► *SL TOOLSET* ► *SL TOOLSET 1.0* ► *DOWNLOADS* ►.
4. Read the documentation for SUM on SAP Support Portal at: <http://support.sap.com/sltoolset> ►.

6 Installation Using Software Update Manager

You want to install SAP Landscape Management 3.0.

Prerequisites

You have prepared the installation.

For more information, see [Preparation \[page 10\]](#).

Procedure

1. Deploy the following SCA files using SUM:
 - VCMCR4E
 - VCM
2. Restart SAP NetWeaver AS for Java.
3. In SAP Landscape Management, choose quick link [Info](#), to check which SAP Landscape Management edition you are currently using.

7 Upgrading Release 2.1 to Release 3.0

You want to upgrade SAP Landscape Virtualization Management 2.1 to SAP Landscape Management 3.0.

Prerequisites

You have prepared the upgrade.

For more information, see [Preparation \[page 10\]](#)

Procedure

1. Export the configuration data.

- a. In SAP Landscape Virtualization Management choose ► [Setup](#) ► [Export, Import, Reset](#) ►.
- b. Navigate through the workflow by following the instructions on the screen.
- c. Choose [Generate Export File](#).

The system generates an XML backup data file containing all configuration details. You can select the file name to view the details in a new browser window and save it in any preferred location.

2. Deploy the following SCA files using SUM:

- VCMCR4E
- VCM

3. Restart SAP NetWeaver AS for Java.

4. In SAP Landscape Management, choose quick link [Info](#), to check which SAP Landscape Management edition you are currently using.

5. Import the Configuration data.

- a. In SAP Landscape Management choose ► [Setup](#) ► [Export, Import, Reset](#) ►.
- b. Choose [Import](#).
- c. Choose the XML file you exported and want to upload.
- d. Enter the password used for encryption during the export of configuration data.
- e. Choose [Load Configuration](#).
- f. View the summary of the data contained in the XML file.
- g. Save your entries.

Results

SAP Landscape Management applies your configuration and settings from SAP Landscape Virtualization Management 2.1.

i Note

- You can now no longer retry a process in SAP Landscape Management 3.0 that is created with Release 2.1.
- Starting with SAP Landscape Management 3.0, the task planner has been replaced by the scheduler and tasks have been replaced by operation templates. Tasks from the task planner have not been migrated to operation templates.

For more information, see [Migrating Tasks to Operation Templates \[page 17\]](#).

8 Implementing Support Packages and Patches

You want to implement a SAP Landscape Management Support Package or Patch.

Prerequisites

When implementing Support Packages, no other user should be logged on except for the system administrator, and no background jobs should be running.

Context

Support Packages are a collection of one or more patches and a patch is a code-correction for a specific version of an SAP product.

Procedure

1. Export the configuration data.
 - a. In SAP Landscape Management choose ► **Setup** ► **Export, Import, Reset** ►.
 - b. Navigate through the workflow by following the instructions on the screen.
 - c. Choose **Generate Export File**.

The system generates an XML backup data file containing all configuration details. You can select the file name to view the details in a new browser window and save it in any preferred location.

2. Optional: Back up your SAP Landscape Management system.
3. Obtain the SCA files required from SAP Support Portal at <https://launchpad.support.sap.com/#/softwarecenter> ►

► **Support Packages and Patches** ► **By Alphabetical Index (A-Z)** ► **L** ► **SAP LANDSCAPE MGT STD** ► **SAP LANDSCAPE MGT STD 3.0** ► **COMPRISED SOFTWARE COMPONENT VERSIONS** ► **VCM LVM** <VCM **LAMA Component** > ►.

4. Deploy the SCA files using SUM.
5. Restart SAP NetWeaver AS for Java.
6. Import the Configuration data.
 - a. In SAP Landscape Management choose ► **Setup** ► **Export, Import, Reset** ►.
 - b. Choose **Import**.

-
- c. Choose the XML file you exported and want to upload.
 - d. Enter the password used for encryption during the export of configuration data.
 - e. Choose [Load Configuration](#).
 - f. View the summary of the data contained in the XML file.
 - g. Save your entries.
7. In SAP Landscape Management, choose quick link [Info](#), to check which SAP Landscape Management edition you are currently using.

9 Post-Installation

Prepare the IT landscape for SAP Landscape Management.

9.1 Carrying Out the Initial Setup Using the Configuration Wizard

You configure the components of SAP Landscape Management using the configuration wizard.

After the initial setup, you can access SAP Landscape Management using the following URL:

`http://<host>:<port>/lama`

For more information, see the Application Help for SAP Landscape Management, standard edition and search for *Carrying Out the Initial Setup Using the Configuration Wizard*.

9.2 Configuring SAP Host Agent

You configure SAP Host Agent to enable instances to be started and stopped on computer systems, and to enable the status of computer systems to be monitored.

For more information, see the Application Help for SAP Landscape Management, standard edition and search for *Configuring SAP Host Agent*.

9.3 Preparing SAP Application Instances

You enable SAP application instances so that the instances can move across the computing nodes in a landscape consisting of adaptively installed instances.

For moving the instances, you implement them virtually in SAP Landscape Management. This means that you decouple the instances from the underlying computing node with its file systems and settings.

For more information, see the Application Help for SAP Landscape Management, standard edition and search for *Preparing SAP Application Instances*.

9.4 Configuring the Landscape

You configure SAP Landscape Management in an IT landscape, and integrate all different components of an adaptive computing environment into SAP Landscape Management.

This includes the initial landscape setup, the infrastructure configuration, initial entities configuration, and so on.

For more information, see the Application Help for SAP Landscape Management, standard edition and search for [Landscape Configuration](#).


Note

By default, the embedded SAP Landscape Management application help displays the content that is published on SAP Help Portal.

In case you have downloaded the application help and stored it in any preferred location, you can individually specify the path from where the application help content is accessed.

To specify the path from where the application help content is accessed, proceed as follows:

1. In SAP Landscape Management, choose ► [Setup](#) ► [Settings](#) ►.
2. On the [User Interface](#) tab, choose [Edit](#).
3. Specify the [Online Help Path](#).
4. Save your entries.

For more information, see SAP Note [101481](#)  - Composite SAP Note: Application help and SAP Library.

9.5 Migrating Tasks to Operation Templates

You migrate task from the task planner to operation templates.

Prerequisites

- You have assigned the `LVM_SUPERADMIN` role.
- You upgraded SAP Landscape Virtualization Management 2.1 to SAP Landscape Management 3.0.
For more information, see [Upgrading Release 2.1 to Release 3.0 \[page 12\]](#).
- You have scheduled tasks with SAP Landscape Virtualization Management 2.1.

Context

To execute operations at a specific point in time with SAP Landscape Virtualization Management 2.1, you scheduled tasks in the task planner. Starting with SAP Landscape Management 3.0, the task planner has been

replaced by the scheduler and tasks have been replaced by operation templates. Tasks from the task planner have not yet been migrated to operation templates. To make these tasks available for execution, you need to migrate these tasks manually.

Procedure

1. Choose ► [Automation Studio](#) ► [Tasks](#) ►.
2. Optional: To delete tasks irretrievably, select the tasks and choose [Remove](#).
3. Choose [Migrate](#).

SAP Landscape Management migrates all tasks that are not removed and that are displayed in the task planner. These tasks are now available as operation templates under ► [Automation Studio](#) ► [Schedule](#) ►.

10 Additional Information

For information about integrating all different components of an adaptive computing environment into SAP Landscape Management, see the Application Help for [SAP Landscape Management, standard edition](#) and search for *Landscape Configuration*.

11 Upgrading SAP NetWeaver Adaptive Computing Controller to SAP Landscape Management

The SAP NetWeaver Adaptive Computing Controller (ACC) versions were delivered as part of the SAP Process Integration or SAP Composition Environment shipment. SAP Landscape Management is an add-on to SAP NetWeaver 7.5. There is no upgrade installer available from ACC to SAP Landscape Management.

Context

➔ Recommendation

Export your ACC configuration to an XML file, and then import the configuration to SAP Landscape Management, as described in this section.

Procedure

Exporting Configuration Data from ACC

1. In ACC, choose **Configuration > Export**.
2. Select or deselect the services, resources, networks, pools, and so on, you want to export.
3. On the **Summary** screen, you can enter a description for the export and set a password for encrypting your user accounts.
4. Save the generated XML file.

Importing Configuration Data to SAP Landscape Management

5. In SAP Landscape Management, choose **Setup > Add, Export, Import, Reset > Import**.
6. Select the XML file you want to import.
7. Choose **Load Configuration Data**.
8. On the **Save Configuration** screen, choose **Save** to start the import.

You have to transport the following data manually into your SAP Landscape Management environment if required:

- E-mail templates (only the initial templates are defined in SAP Landscape Management)
- Tasks from the task planner
- ACC activities logs

12 Undeploying Using Telnet

You use Telnet to undeploy all SAP Landscape Management SCA files from your SAP NetWeaver Application Server for Java.

Context

➔ Recommendation

Before undeploying, export SAP Landscape Management configuration information as backup to an XML file. This allows you to restore your configuration settings.

Procedure

1. Save the following code syntax as XML file on your SAP NetWeaver Application Server for Java from which you want to undeploy the application.

Code Syntax

```
<?xml version="1.0"?>
<Components>
  <DevelopmentComponentLine name="tc~vcm~apps~facades~app" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~misc~app" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~sapui5~app" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~odata~app" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~model" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~types" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~utils" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~aclog" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~acm" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~activities"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~config" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~master" vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~monitor"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~operations~storages"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~overview"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~provisioning"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~reports"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~resource"
  vendor="sap.com"/>
  <DevelopmentComponentLine name="tc~vcm~apps~wd~views~services"
  vendor="sap.com"/>

```

```

<DevelopmentComponentLine name="tc~vcm~apps~wd~views~setup~ex_import"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~setup~extended"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~setup~general"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~taskplnr"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~template"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~virtual"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~apps~wd~views~visualization"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~base~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~ctc~setup~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~ctc~setup~ctc" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~db~common~dict" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~engine~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~monitor~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~outgoing~wsproxy~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~process~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~report~core~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~report~soap~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~sdk~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~storage~adapter~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~storage~adapter~impl~app"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~virtual~adapter~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~virtual~adapter~impl~app"
vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~virtual~core~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~workload~core~app" vendor="sap.com"/>
<DevelopmentComponentLine name="tc~vcm~report~crlib~app" vendor="sap.com"/>
</Components>

```

2. Ensure that the XML file is readable by the <sid>adm.
3. Run a Telnet client and connect to your SAP NetWeaver Application Server for Java by specifying the host and the corresponding port `telnet localhost 5<Instance number>08`.

If a connection is established, the Telnet Administration Console is open.

4. To authenticate yourself, enter valid login information (including user name and password).
5. To undeploy, enter the following commands:
 - a. `undeploy list=<absolute path to the XML file>`
 - b. `undeploy_empty_sca name=VCM vendor=sap.com`
 - c. `undeploy_empty_sca name=VCMCR4E vendor=sap.com`
6. To check if the SCA files are undeployed, enter the following commands:
 - a. `explore name=VCM`
 - b. `explore name=VCMCR4E`

Each check should result in an error message: There is no component registered with the specified name <SCA file name>.

7. To close the Telnet connection enter `exit` on the command line.

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**[go.sap.com/registration/
contact.html](http://go.sap.com/registration/contact.html)**

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