

Oracle® Virtual Assembly Builder

Release Notes

11g Release 1 (11.1.1)

E17109-01

April 2010

These release notes describe issues associated with Oracle Virtual Assembly Builder. They include the following topics:

- [Section 1, "Component Specific Issues"](#)
- [Section 2, "Oracle Virtual Assembly Builder Studio Operation Issues"](#)
- [Section 3, "Documentation Errata"](#)
- [Section 4, "Documentation Accessibility"](#)

1 Component Specific Issues

This section describes specific issues for components that Oracle Virtual Assembly Builder can introspect. The list of issues for each component presents the most severe or frequently encountered issues first, followed by lower priority issues.

This section describes the following topics:

- [Section 1.1, "Oracle WebLogic Server Issues"](#)
- [Section 1.2, "Oracle Web Cache Issues"](#)
- [Section 1.3, "Oracle Database Issues"](#)

1.1 Oracle WebLogic Server Issues

This section describes issues for Oracle WebLogic Server.

1.1.1 Deployment Failure Due to Missing .JAR in Base Image

Deployment of an Oracle WebLogic Server application fails due to a missing jar. The error occurs if the following conditions are present for the application:

- Part of the Oracle WebLogic Server domain
- Packed during introspection as part of the domain_template.jar
- Resides on an Oracle WebLogic Server assembly on Oracle JRockit Virtual Edition

This problem does not occur on the Oracle Enterprise Linux deployment because the needed library is captured as part of the reference system (the middleware home contains the library).

This failure does not cause the overall deployment to fail; only the Oracle WebLogic Server deployment of the applications requiring the missing libraries are affected.

To avoid this problem, use Oracle WebLogic Server JRockit Virtual Edition tools to copy over the needed libraries onto the Oracle JRockit Virtual Edition image:

1. Shut down the virtual machines after Oracle Virtual Assembly Builder deployment succeeds.
2. Use Oracle WebLogic Server JRockit Virtual Edition tools to copy the missing libraries onto the image.
3. Power the image back on

1.1.2 High Availability Patch for Oracle VM 2.2

This issue impacts only users who have HA enabled for their appliance VMs; users who do not have HA enabled appliance virtual machines, there is no issue and no action is required.

Oracle Corporation recommends that you use Oracle Virtual Assembly Builder or Oracle WebLogic Server Node Manager to stop HA appliances (that is, appliances within assemblies configured as High-Availability virtual machines) running on Oracle WebLogic Server on JRockit Virtual Edition. If you want to stop these appliances using other consoles or operations, then you must install a patch that fixes a problem that erroneously restarts the appliances.

The High Availability (HA) enhancement is delivered through an updated Oracle VM agent and Xen packages which can be applied to Oracle VM Server 2.2. The new packages are available for download from Oracle's ULN (Unbreakable Linux Network at <http://linux.oracle.com> <<http://linux.oracle.com%22>>

When you navigate to that location, choose the `ovm22_i386_latest` channel. See the FAQ (https://linux.oracle.com/uln_faq.html<https://linux.oracle.com/uln_faq.html%22>) for detailed instructions.

After you update your Oracle VM Server 2.2 (there is no need for update if you have a new install of Oracle VM Server 2.2.1), ensure you have the required packages or later versions:

- `ovs-agent-2.3-38`
- `xen-3.4.0-0.1.10`
- `xen-64-3.4.0-0.1.10`
- `xen-debugger-3.4.0-0.1.10`
- `xen-devel-3.4.0-0.1.10`
- `xen-tools-3.4.0-0.1.10`

1.1.3 No SSL Support When Deploying to WebLogic Server on JRockit Virtual Edition

Because the base image for WebLogic Server on JRockit Virtual Edition does not include a demo trust store, Oracle Virtual Assembly Builder does not support SSL when deploying to WebLogic Server on JRockit Virtual Edition. This means that you cannot introspect and then deploy to WebLogic Server on JRockit Virtual Edition those domains that have the domain-wide admin port enabled.

There may also be issues with enabling SSL ports for WebLogic Server on JRockit Virtual Edition. You must configure SSL post-deployment for WebLogic Server on JRockit Virtual Edition.

1.1.4 Applications Accessing Web Services Not Updated at Deployment

An application that accesses a Web service that is also hosted on the Oracle WebLogic Server reference system will not get updated to point to the new web service location upon deployment. You must update the application to access the web service WSDL on the new Oracle VM host, and then redeploy the application through Oracle WebLogic Server administration tools, such as Admin Console or wlst, to the Oracle VM Oracle WebLogic Server environment.

1.1.5 Limitation with Oracle WLS Domains Upgraded from 10.3.1

Oracle Virtual Assembly Builder uses a pack/unpack utility to when moving Oracle WebLogic Server domains. An issue with the utility causes the unpack operation to fail when using the utility to move a domain that was originally a 10.3.1 domain, but which was upgraded to 10.3.2 during installation of 10.3.2.

1.1.6 Templates Created on Individual Servers Cannot Be Deployed

If you create a template on an individual servers in Oracle WebLogic Server, the CLI and GUI operations will not indicate an error. However, such templates cannot be deployed because they lack certain deployment artifacts (the domain template jar in content, and data at the assembly level).

1.1.7 Admin URL Required to be Specified in Scenario Where Managed Server No Longer Running

This issue applies to an uncommon scenario where Oracle Virtual Assembly Builder has deployed and started the required instances in the assembly, including the Oracle WebLogic Server Managed Servers, and later the Managed Server (but not the Guest OS) has either crashed or been explicitly shutdown through an external tool.

If you want to perform manual starts from the context of the Guest-OS, you must manually modify the StartManagedServer.sh script to provide the correct Admin Server URL (Admin Server hostname). This is required because the default admin URL has the wrong value (the machine name of the Admin Server is not known at the time of template creation).

You can still start or stop the server through the node manager in Admin Console.

1.2 Oracle Web Cache Issues

This section describes issues for Oracle Web Cache.

1.2.1 Oracle Web Cache Administration Port Not a Privileged Port

Oracle Virtual Assembly Builder does not support an Oracle Web Cache appliance to be deployed with its administration port being a privileged port (a port number less than 1024).

1.2.2 Oracle Web Cache Scaling Issues

Oracle Virtual Assembly Builder does not automatically update the webcache.xml file for each instance, after you perform scaling. Even when the scaling operation completes without errors, you must still update the webcache.xml file for each instance, so that the instance recognizes all the members in the cluster.

When performing scaling operations on Oracle Web Cache deployments, you must scale in increments of 1 instance (either up or down), otherwise scaling will not complete successfully.

1.2.3 Update Virtual Host Map Properties When Making Port Changes

In Oracle Web Cache, there is not necessarily a correlation between the ports in the virtual host map (VHM) elements and those in the listen elements of the Oracle Web Cache configuration. Whenever you make a port change, you must update your VHM ports by manually updating the properties associated with the VHMs.

1.3 Oracle Database Issues

This section describes issues for Oracle Database.

1.3.1 Limited Database Configuration Support

The database introspector expects the listeners (the listener.ora configuration) to be configured as follows:

```
(ADDRESS = (PROTOCOL = TCP) (HOST = example.cm) (PORT = 5521))
```

Note: The protocol, host, and port are all required, and must appear in the order above.

1.3.2 Update Database Appliance Memory Requirement

The default database appliance memory requirement may not be appropriate for your environment. You must modify this value to be greater or equal to two times the value of the `memory_target` parameter.

Retrieve the `memory_target` parameter value by using the following SQL statement:

```
SQL> show parameter memory_target
NAME                                TYPE                                VALUE
-----                                -                                -
memory_target                        big integer                          1000M
```

In `appliance.xml`, change the value for `MEMORY_MB` to the appropriate size:

```
<resource-requirements>
  <resource-requirement name="MEMORY_MB"min="2048"/>
</resource-requirements>
```

2 Oracle Virtual Assembly Builder Studio Operation Issues

This section describes issues for operations for Oracle Virtual Assembly Builder studio, such as introspection, packaging, and deployment. It includes the following topics:

- [Section 2.1, "Oracle Virtual Assembly Builder Introspection Issues"](#)
- [Section 2.2, "Oracle Virtual Assembly Builder Packaging Issues"](#)
- [Section 2.3, "Oracle Virtual Assembly Builder Deployment Issues"](#)
- [Section 2.4, "Other Oracle Virtual Assembly Builder Issues"](#)

2.1 Oracle Virtual Assembly Builder Introspection Issues

This section describes issues observed during introspection.

2.1.1 Introspecting into an Open Parent Assembly

When you have an assembly open in the editor, and you introspect a new component into that assembly (by selecting that assembly as the parent in the component Introspection wizard), you must close and reopen the assembly to be able to view the component in the editor.

2.2 Oracle Virtual Assembly Builder Packaging Issues

This section describes issues observed during or after deployment.

2.2.1 abctl: Naming Constraints for Assemblies are not Enforced

You can create the following names for entities used by Oracle Virtual Assembly Builder:

- Assembly names
- Appliance names
- Resource Manager connection names
- Deployment plan names

You can use the command line to create names for assemblies and appliances.

Oracle Virtual Assembly Builder requires the following constraints on names you create:

- must begin with an alphabetic character.
- must be 4-40 characters in length.
- must consist only of A-Z, a-z, 0-9, '-', and '_' characters.

The command line utility does not report an error when these constraints are violated. The GUI does enforce these constraints.

2.3 Oracle Virtual Assembly Builder Deployment Issues

This section describes issues observed during deployment.

2.3.1 NFS Mounting Not Supported in Reference Systems

Oracle Virtual Assembly Builder does not support NFS mounting in the reference system, since these NFS mounts will not be created by Assembly Builder in the deployment environment. In some cases, deployment will fail if the reference system has an NFS mount.

A number of third-party tools require mounting file systems as part of their configuration. This can require specific workarounds. For example, when using the Websphere MessageQueue external JMS server, you may see the following issues:

- The configuration for the JMS Server requires access to a class provided by Websphere. In some environments, those classes (also known as jars) are added to the PRE_CLASSPATH environment variable prior to starting Oracle WebLogic Server. Ensure that the configuration for your environment does not require modification for Oracle WebLogic Server to be able to see these jar files automatically on startup.
- The Oracle WebLogic Server configuration for the JMS server requires a JNDI connection URL as follows, 'file://<path to mq config>'. This file resides on the external Websphere server, and must be mounted locally so it can be used.

2.3.2 Firewall Implications for Template Registration

To allow template registration, the Oracle VM host must be able to download the template through HTTP from the Assembly Builder host. If you are using a firewall (for example, iptables on Linux) then you need to properly configure that firewall to allow the communication. By default Assembly Builder specifies its HTTP port to be "0" which causes the system to issue one (so there is no default port).

You can specify the port by setting the "ovmPort" property in `deployer.properties`.

A more simple solution is to turn off the firewall. For iptables, use the following command: `/etc/init.d/iptables stop`

To configure your firewall, refer to the documentation for your firewall.

2.3.3 Recovering from Unexpected Errors During Deployment

Whenever an unexpected error occurs during deployment, you typically want to examine what went wrong and perform necessary cleanup before recovering from the error. For these reasons, Oracle Virtual Assembly Builder provides neither an automatic recovery mechanism, nor a tool to recover from a failure.

To perform recovery of the deployer:

1. Examine the resource pools in the corresponding Oracle Virtual Machine managers configured in the `resource-pools.xml` file relevant to the crashed `AB_HOME` and perform cleanup. This includes cleaning up (stopping and destroying) of all instances initiated by Oracle Virtual Assembly Builder.
2. Delete the `.hastore` file.

This returns the deployer to a clean state.

2.3.4 Post-deployment Changes to the Deployment Plan

If you have deployed with a deployment plan, then made property changes to that deployment plan (after deploying), those changes are recognized when you perform scale operations through the command line interface. However, changes to the deployment plan are not recognized when you perform scale operations through the graphical Assembly Builder Studio.

For example: you create deployment plan *P*, with `scalability target=1,max=4` for a certain appliance *A*. You specify an IP address in *P* only for `A_0` (the first index), and deployment succeeds. You do not specify IP addresses for `A_1`, `A_2`, and `A_3`.

After deploying, you add IP addresses for `A_1`, `A_2`, `A_3` in *P*, and try to scale up. Although the new IP addresses are in the deployment plan, they are not recognized in the scale operation. The scales will fail if they relied on the IPs being specified (that is, a non-DHCP environment).

2.3.5 Deployment Plan Editor Limitation on Saving Unsaved Changes

When a deployment plan is edited and changes are made, you have the option (as with any editor) of attempting to close the editor without saving changes. You can do this in various ways, for example by selecting **File > Close** from the File menu, by clicking the "X" button in the editor's tab, or by closing the application. This issue described here occurs equally in each of these cases.

When you attempt to close an editor with unsaved changes, the editor prompts you with a dialog box: "<PLAN NAME> has been modified. Save changes?", and presents you with the choices 'Yes', 'No', and 'Cancel.' However, if you select Yes, your work is not saved. The editor closes and your changes are lost.

Workaround: before attempting to close the editor, save your work with the **File > Save** or **File > Save All** menu items or by pressing **Ctrl-S** while the editor has the keyboard focus. All these actions will correctly save your work.

This issue applies only to the Deployment Plan editor; the Assembly Editor is not similarly affected.

2.4 Other Oracle Virtual Assembly Builder Issues

This section describes other issues observed while performing operations in Oracle Virtual Assembly Builder.

2.4.1 Delete Operation Performance Issue with Different File Systems

When deleting assemblies from a catalog, it is recommended that you use the same disk for both the \$AB_HOME and the catalog to avoid slow performance. When using different file systems, the performance of the delete operation may be very slow (and progress messages do not appear). You may notice this particularly when the catalog is of large size.

2.4.2 Virtual Machine Swap Space

Ensure your virtual machines have at least 500MB of available swap space (on each machine).

3 Documentation Errata

This section describes documentation errata. It includes the following topic:

- [Section 3.1, "Search in Online Help Not Available"](#)

3.1 Search in Online Help Not Available

The search feature in online Help is not available in this release.

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