
JCSS 10.1 Installation Procedures Manual

August 2010



Disclaimer: As of October 2007, NETWARS was re-designated by the Program Manager Office as the Joint Communications Simulation System (JCSS). JCSS was selected as the new industry name to better reflect the inherent joint communication capabilities of the software. Users should be aware that no software updates were conducted as part of the software name change.

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1 Installation Instructions

1.1 JCSS v10.1 Installation Information

1.1.1 Contents of the Installer

- Scenario Builder
 - Simulation Domain
 - HLA Commander
 - VOACAP (Optional)
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1.1.2 Prerequisites

- Disk space required for JCSS: ~3 GB.
- Disk space required for VOACAP: ~12 MB.
- MSVC++ 6.0 for custom model development in 32-bit version of JCSS.
- MSVC++ 2005 for custom model development in 64-bit version of JCSS.

Minimum Hardware Requirements: Pentium 1GHz, 512 MB RAM.

1.1.3 VOACAP Installation

1. JCSS requires VOACAP to model long range HF radio propagation during ALE (Automatic Link Establishment) for HF radios.
 2. The VOACAP software has its own InstallShield script that is kicked off during JCSS installation. Users may or may not install this software.
 3. Note that the VOACAP software requires directory names that conform to the old DOS 8.3 format, i.e., the directory name should be no more than 8 characters and should not include spaces (e.g., C:\VOACAP).
 4. The un-installation of VOACAP is independent of JCSS.
 5. Required disk space: ~12MB.
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**1.1.4
Licensing
Issues**

JCSS v10.1 employs the same license server application as JCSS v10.0 and 9.0. No special reconfiguration is required -- simply specifying the name of the license server during the JCSS v10.1 installation will suffice.

But users upgrading from JCSS v8.0 or earlier will need to upgrade their existing pre-15.0 licenses to the new format before using JCSS v10.1. To perform this operation, use the "Edit > License Management" menu once the JCSS v10.1 software is installed. Once inside the License Manager, choose a license and select the "Convert Pre-16.0 License" button. For more information on this conversion, please contact the JCSS CM at JCSS@disa.mil or view the OPNET website (www.opnet.com).

Note that users who convert their license files to the new 16.0 format will no longer be able to run pre-9.0 JCSS and pre-15.0 OPNET software in standalone mode.

To use Discrete Event Simulation (DES), both a Simulation Runtime (SRS) license and either an OPNET ITGuru or Modeler license must exist. These licenses can be obtained by contacting OPNET directly (www.opnet.com) or through the JCSS Program Office (JCSS@disa.mil).

If you have concerns, please contact the JCSS CM at JCSS@disa.mil

**1.1.5
Un-Installation**

The un-installation process does not delete all the directories so it is strongly recommended that you manually delete the JCSS directories prior to installing JCSS.

**1.1.6
JCSS Help and
Assistance**

- Users are no longer required to contact the JCSS CM for license permit numbers. The JCSS v10.1 license configuration is now embedded within the software and will register upon installation completion. For more information, please refer to the Software Release Bulletin (SRB).
- For issues regarding using the software, please contact the JCSS Help Desk either at jcss@opnet.com or at 240.497.3000 x2699. Note that emails and voice mails to the Help Desk are checked once a day.
- The JCSS Program Manager (PM) from DISA is Maj. Charles Johnson, who can be contacted as follows:

Maj. Charles Johnson
Charles.Johnson3@disa.mil
703-681-2558

- For any other issues, please contact the JCSS Configuration Manager (CM) at JCSS@disa.mil

1.2 New Installation of JCSS v10.1

1.2.1 Installation of JCSS v10.1

Before you Begin:

1. If you are using your current machine as a license server for other OPNET software packages, please stop the license server. On Windows NT, go to **Start > Settings > Control Panel > Services**. For Windows 2000 or Windows XP, go to **Start > Settings > Control Panel > Administrative Tools > Services** to stop the OPNET License Server.
2. Check the available disk space on the drives of your machine.

Steps to Install:

1. Insert the JCSS v10.1 CD.
2. Run the Setup.exe program that appears in the subsequent window.
3. Click **Next** to go through the main installation window.
4. Select the optional software components which you would like to install and click **Next**.
 - a. The VOACAP software (ITS HF Propagation) is required by JCSS to model long range HF radio propagation during ALE.
 - b. Acrobat Reader is required to view the JCSS Scenario Builder documentation.
 - c. HLA Commander is used by JCSS for co-simulation and federation purposes. This software does not require a separate installation program and will be installed with the main JCSS software.
 - d. OPNET Modeler is an optional component which installs a Modeler shortcut into the JCSS menu. The user is then able to launch a special JCSS version of OPNET Modeler inside the JCSS tool or from the Windows start menu. This option will not install a standalone version of OPNET Modeler. Note that an OPNET Modeler license is required to utilize this feature.
5. Select the version of the software you would like to install and click **Next**.
 - a. The 32-bit Version is meant for standard 32-bit Windows machines. The JCSS GUI and simulation engines (Capacity Planner and Discrete Event Simulation) will be setup to optimize this particular machine architecture. This option will be used for most users and is the default for the JCSS installer.
 - b. The 64-bit Version is meant for AMD 64-bit Windows machines only. The JCSS GUI and simulation engines (Capacity Planner and Discrete Event Simulation) will be setup to optimize the extra

performance characteristics of the 64-bit architecture (i.e., extra memory over 32-bit machines). Note that this option should only be selected if you are running 64-bit machine architecture.

6. Specify the destination location for the JCSS software and click **Next**.
 7. View the Installation Summary menu and click **Next** if you are satisfied with your selections. If you need to make any modifications, click the **Back** button.
 8. After the JCSS program has been installed, you may be prompted to copy over any user files from a previous version of NETWARS/JCSS (if one exists). Click **Yes** to copy these files to the new installation directory.
 9. If you decided to install the Acrobat Reader, then the installation for this product will begin. Please follow the installation directions for this software.
 10. Next, the install program prompts you for license server setup information. For users that had to stop the license server earlier, choose the **floating: serve licenses from this computer** option, which will restart the license server. Other users may select either **standalone**, **floating: serve licenses from this computer**, or **floating: access licenses from remote server for the license setup**. Standalone mode allows the software to use a local license server.
 11. After specifying the licensing mode, specify the name of your license server.
 12. If you decided to install the ITS HF Propagation software, then the installation for this software product will begin. Please specify a directory name that **does not include spaces** and is **no more than 8 characters** as VOACAP follows the old DOS 8.3 format.
 13. If you decided to install the Adobe Acrobat software, then the installation for this product will begin. Please follow the installation directions for this software.
 14. Click the **Finish** button to complete installing the JCSS software.
 15. If needed, you may then call the NETWARS/JCSS Help Desk or OPNET Technical Support to assist you with any installation problems.
 16. Finally, you may run the JCSS software from the **Start > Programs** menu shortcut.
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1.3 Upgrading from JCSS v10.0 to JCSS v10.1

1.3.1 Upgrading from JCSS v10.0 to JCSS v10.1

Before you Begin:

1. Go to **Start > Settings > Control Panel** and open up the Add/Remove Programs utility. Select JCSS version 10.0 and click on Change/Remove. This will uninstall JCSS v10.0 from your computer.
2. Once the software has been uninstalled, you must remove the remaining folders from the previously installed location manually. Using Windows Explorer, navigate to the folder where JCSS 10.0 was installed. Delete the contents of this folder and sub-folders.

Steps to Install:

3. Perform the steps listed in the New Installation of JCSS v10.1 section, 1.2.1. You should not install the new version of JCSS to the same directory as a previous version (i.e. overwrite the previous installation). This is not recommended and can cause problems when running the new version. For JCSS v10.1, use a folder like C:\JCSSv10_1.

1.4 Upgrading from a previous JCSS Toolkit (JCSS v9.0 and prior) to JCSS v10.1

1.4.1 Upgrading from a previous JCSS Toolkit (v9.0 and prior) to JCSS v10.1

Before you Begin:

1. Copy all previously saved models (projects, scenarios and OPFACs) and IER/demand files, i.e., [User_Data > Projects](#), [User_Data > Opfac_Models](#), [User_Data > Opfacs](#), and [User_Data > IER_Text_Files](#), located in <drive>:\JCSS to a temporary location. The JCSS v10.1 installer will prompt you to move these files to the new JCSS location, but it is also a good idea to create a backup.

Steps to Install:

2. Perform the steps listed in the New Installation of JCSS v10.1 section, 1.2.1. You should not install the new version of JCSS to the same directory as a previous version (i.e. overwrite the previous installation). This is not recommended and can cause problems when running the new version.

After you Install:

3. Go to [Start > Settings > Control Panel](#) and open up the Add/Remove Programs utility. Select the older version of JCSS and click on Change/Remove. Click on OK in the Confirm Uninstall dialog box.
 4. Once the un-installation process is complete, delete the <drive>:\JCSS directory where the older JCSS version was installed.
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1.5 Possible Installation Issues

1.5.1 Possible Installation Issues

Microsoft Visual C++ 6.0:

- Clients who use Microsoft Visual C++ 6.0 might see an error similar to the one below when launching a discrete event simulation:

*Errors reported by the binder program follow [...]
op_win_stdio_patch.obj : fatal error LNK1103: debugging information corrupt; recompile module*

To prevent this issue, rename the following files in the “<JCSS Installation Directory>\Scenario_Builder\16.0.A\sys\pc_intel_win32\lib” directory:

1. Rename the file “op_win_stdio_patch.obj” to “op_win_stdio_patch.vc7.obj”
2. Rename the file “op_win_stdio_patch.vc6.obj” to “op_win_stdio_patch.obj”

After making these changes, restart the software.

Using JCSS without a compiler:

Clients who utilize JCSS without a compiler may need to install the latest Microsoft Redistribution Package. Typically, if the user has an incorrect setup, the software will not startup correctly.

If this happens to you, please proceed as follows before contacting JCSS Technical Support:

- Install the package listed below
- Before restarting JCSS, remove the env_db16.0 file from the following folder: <JCSS Installation Directory>\Scenario_Builder\op_admin

- 32-bit Installation and Hardware:

Microsoft Visual C++ 2005 SP1 Redistributable Package (x86)

<http://www.microsoft.com/downloads/details.aspx?familyid=200b2fd9-ae1a-4a14-984d-389c36f85647&displaylang=en>

- 64-bit Installation and Hardware:

Microsoft Visual C++ 2005 SP1 Redistributable Package (x64)

<http://www.microsoft.com/downloads/details.aspx?FamilyID=EB4EBE2>

D-33C0-4A47-9DD4-B9A6D7BD44DA&displaylang=en

JCSS integration with XMLLite:

Clients who work with JCSS may need to upgrade their Windows operating system. The Capacity Planner simulation uses XMLLite which is a powerful, XML tool to generate fast results with less memory. During JCSS startup, clients may see the message “The application has failed to start because XmlLite.dll was not found. Re-installing the application may fix this problem.”

To overcome this issue, please proceed as follows before contacting JCSS Technical Support:

- Install the package listed below
- Before restarting JCSS, remove the env_db16.0 file from the following folder: <JCSS Installation Directory>\Scenario_Builder\op_admin

- 32-bit Installation and Hardware:

XMLLite for Windows XP (KB915865)

<http://www.microsoft.com/downloads/details.aspx?FamilyId=D7B5DC81-AD14-4DE2-8AD5-8C4A9AAB5992&displaylang=en>

- 64-bit Installation and Hardware:

XMLLite for Windows XP x64 Edition (KB915865)

<http://www.microsoft.com/downloadS/details.aspx?FamilyID=c7cb26e9-68f1-4f80-b231-79d044431e8e&displaylang=en>

- Please note that the XmlLite runtime file, XmlLite.dll, is now integrated into the following operating systems and products:

Windows XP with Service Pack 3 or later.

Windows Server 2003 with Service Pack 2 or later.

1.6 Other Issues

1.6.1 Other Possible Issues

Generating DoDAF Visio Reports:

Clients who plan to export DoDAF views will need to have MS Visio installed to be able to view the DoDAF Visio Reports. If MS Visio is not available, another option would be to use the free Visio Viewer software from Microsoft. This can be downloaded from here:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=d88e4542-b174-4198-ae31-6884e9edd524&displaylang=en>

Filename: JCSS_v10.1_Installation_Procedures_Manual
Directory: D:\Documents and Settings\Shery.Salama\Desktop
Template: D:\Documents and Settings\Shery.Salama\Application Data\Microsoft\Templates\Normal.dot
Title: 1
Subject:
Author: OPNET
Keywords:
Comments:
Creation Date: 11/11/2008 12:34:00 PM
Change Number: 45
Last Saved On: 7/29/2010 10:43:00 AM
Last Saved By: OPNET
Total Editing Time: 163 Minutes
Last Printed On: 9/28/2010 3:49:00 PM
As of Last Complete Printing
Number of Pages: 11
Number of Words: 2,378 (approx.)
Number of Characters: 13,556 (approx.)