Distributed NetBeans for OpenVMS
Version 6.5.2 Installation Guide and Release Notes

September 2010

`HP-AXPVMS-IDESERVER-V0652--1.PCSI_AXPEXE` (IDE Server Kit on OpenVMS Alpha)
`HP-I64VMS-IDESERVER-V0652--1.PCSI_I64EXE` (IDE Server Kit on OpenVMS Integrity servers)
`Distnbopenvms65_v65_200.nbm` (Distributed NetBeans Client Module for NetBeans 6.5)

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1 Overview of Distributed NetBeans

Distributed NetBeans comprises two parts:

- Distributed NetBeans Client for OpenVMS, which is a plug-in for NetBeans 6.5 running on your desktop. You can install the NetBeans IDE (from NetBeans.org) and the Distributed NetBeans Client for OpenVMS on your desktop system.

- IDE Server for OpenVMS, which runs on OpenVMS and provides remote services for the client plug-in. You can install the IDE Server on your OpenVMS system. (You need not install the NetBeans for OpenVMS IDE or any additional plug-in modules on your OpenVMS system.)

Communication between the client system and the remote server system is encrypted using SSL. How to use Distributed NetBeans is explained in the online help that is available through the NetBeans JavaHelp system when you install the NetBeans client module.

This help is fully integrated with the standard NetBeans JavaHelp and may be opened from the Help menu. (The HelpSet option in the Help menu lists installed module help files.)
JavaHelp texts may be copied and pasted into an external text editor or printed. URL links provided in JavaHelp can be copied and pasted into a browser's address field.

In this release, the plug-in of Distributed NetBeans 5.5.1 has been ported to Distributed NetBeans 6.5. All features are the same as Distributed NetBeans 5.5.1.

New Features in Version 6.5.2

- **Web Service Integration Toolkit (WSIT) Support for OpenVMS**

  WSIT is now integrated with the Distributed NetBeans, which allows you to wrap a file into 3GL application.

- **JAVA 6 Support for Integrity servers**

  Distributed NetBeans Version 6.5.2 supports Java 6 on OpenVMS Integrity servers.

2 Before Installing Distributed NetBeans

Hardware Prerequisites - Client

For information about NetBeans IDE desktop system hardware and software prerequisites, see the *Readme* file:

http://netbeans.org/community/releases/65/relnotes.html#system_requirements.

Hardware Prerequisites - IDE Server

The Distributed NetBeans IDE Server requires the following:

» 500MHz minimum Alpha or Integrity servers processor
» 256MB of memory
» 2000 blocks minimum free disk space on your system disk
» ODS-5 or ODS-2 disk (ODS-5 is required to use the Java SDK with Distributed NetBeans)

Software Prerequisites - Client

» NetBeans 6.5 (from NetBeans.org) running on your desktop system.
» Java Standard Edition v jdk1.5.0_17 or higher.
Note: JSE v1.6-04 is not supported from http://developers.sun.com/downloads/ running on your desktop system.
» (Optional) X Windows Server (such as eXcursion) running on your desktop system.

Note: Distributed NetBeans 6.5.1 was the last release that was supported.

An X Windows Server is required to run remote Java applications that use Swing, and to use some of the features of the Distributed NetBeans Client (such as "Use XTerm for Compile" and "Use XTerm for Execution").

Software Prerequisites - IDE Server on OpenVMS Alpha

» OpenVMS Alpha Version 8.2 or higher
» Software Development Kit (SDK) v 1.4.2-7 (or higher) for OpenVMS Alpha for the Java Platform
» All required ECOs for the Java SDK
» Required Debug ECOs (See Remote 3GL Debug Notes)
» HP TCP/IP Services for OpenVMS Version 5.4 ECO 4 or higher
» FTP Service in TCP/IP Services for OpenVMS enabled and started (see FTP Notes)
» (Optional) BASIC, C/C++, FORTRAN, COBOL, or PASCAL compiler for OpenVMS

Software Prerequisites - IDE Server on OpenVMS Integrity servers

» OpenVMS Integrity servers Version 8.2 or higher
» Software Development Kit (SDK) v 1.4.2-7 (or higher) for OpenVMS Integrity servers for the Java Platform
» All required ECOs for the Java SDK
» Required Debug ECOs (See Remote 3GL Debug Notes)
» HP TCP/IP Services for OpenVMS Version 5.5 or higher
» FTP Service in TCP/IP Services for OpenVMS enabled and started (see FTP Notes)
» (Optional) BASIC, C/C++, FORTRAN, COBOL, or PASCAL compiler for OpenVMS

FTP Notes

Before you can use the FTP as your remote file access provider in Distributed NetBeans, the TCP/IP FTP Service must be enabled and started. Enter the following command:

```
$ @SYS$MANAGER:TCPIP$CONFIG
  select 3 - Server components
  select 5 - FTP
  select 2 - Enable and Start
```

For more information, see *HP TCP/IP Services for OpenVMS Installation and Configuration*.

Remote 3GL Debug Notes

For Remote 3GL Debug support, the following kits are required:

For OpenVMS Alpha:

- VMS82A_DEBUG-V0200 or later (for V8.2)
- VMS83A_DEBUG-V0100 or later (for V8.3)
- ACRTL Facility Patch Kit VMS83A_ACRTL-v0400 (for V8.3)

For OpenVMS Integrity servers:

- VMS821I_DEBUG-V0300 or later (for V8.2)
- VMS83I_DEBUG-V0100 or later (for V8.3)
- Version 8.3-1H1 does not require an ECO kit.

3 Downloading and Installing Distributed NetBeans

Downloading the NetBeans Client and IDE Server Kits

Point your browser to the Distributed NetBeans for OpenVMS download page.

Save the IDE Server file `HP-xxxVMS-IDESERVER-V0652--1.PCSI_xxxEXE` (where *xxx* is Alpha or Integrity servers) to any location accessible to the OpenVMS system on which you will install the IDE Server. If applicable, copy or FTP the file(s) to the OpenVMS system.

Expand the IDE Server file by entering:

```
$ RUN HP-AXPVMS-IDESERVER-V0652--1.PCSI_AXPEXE  ! for OpenVMS Alpha
$ RUN HP-I64VMS-IDESERVER-V0652—-1.PCSI_I64EXE  ! for OpenVMS Integrity
servers
```

The file expands to `HP-xxxVMS-IDESERVER-V0652—1.PCSI$COMPRESSED`.

Save the NetBeans client to your desktop system:

`distnbopenvms65_v65_200.nbm` for NetBeans 6.5.

Note: The downloaded .nbm file must have an extension of nbm. The case must match exactly. The downloaded file should be named `distnbopenvms65_v65_200.nbm`.

Installing the NetBeans Client Kit

You must have NetBeans 6.5 (from NetBeans.org) installed on your desktop system **before** you install the Distributed NetBeans for OpenVMS client.

To install the Distributed NetBeans client, perform the following steps.

1. Save the client module to a folder on your desktop system. (The client module is available from the Distributed NetBeans download page on the Distributed NetBeans web site.)
2. Start NetBeans on your desktop system.
3. Select the Installed option and remove the old NBM, if installed in the NetBeans IDE, this can be done by selecting the Distributed plug-in and select **Remove** button. If you are prompted to restart NetBeans, you must select **Restart the IDE** to complete installation of the module.
4. Open the NetBeans plug-in wizard (choose Plug-in from the **Tools** menu).
5. Select the **Downloaded** tab option. Select “Add Plugin…”.
6. Follow the instructions on the wizard for completing the installation.
7. After clicking **Finish**, if you are prompted to restart NetBeans, you must select **Restart the IDE** to complete installation of the module.

The Distributed NetBeans client module contains support for the following features on OpenVMS.

- WSIT Support for OpenVMS
- JAVA 6 Support for Integrity servers
- Distributed OpenVMS File Access
- Distributed BASIC Support for OpenVMS
- Distributed C/C++ Support for OpenVMS
- Distributed COBOL Support for OpenVMS
- Distributed FORTRAN Support for OpenVMS
- Distributed PASCAL Support for OpenVMS
- Distributed DCL Support for OpenVMS
- EDTkeypad Support (disabled by default)

To enable EDTkeypad support, from the Tools menu, select Options, the press the keymap button on the left. Select edtkeypad from the Profile: drop down menu. The Distributed Client can be disabled or uninstalled, or both, from the Module Manager on the Tools menu.

Installing the IDE Server Kit

```
$ PRODUCT INSTALL IDESERVER
```

Install the server .PCSI$COMPRESSED file by entering the following command from the SYSTEM account or another privileged account. (Do not expand the .PCSI$COMPRESSED file before installing it; PCSI installs from the compressed kit directly.)

```
$ PRODUCT INSTALL IDESERVER
```

The IDE Server is installed into SYS$COMMON by default. To specify a different installation location, use the /DESTINATION qualifier on the PRODUCT INSTALL command line, or set the PCSI$DESTINATION logical name to a different location.

Following is a sample installation of the IDE Server on OpenVMS Alpha.

```
$ PRODUCT INSTALL IDESERVER

The following product has been selected:
    HP AXPVMS IDESERVER V6.5           Layered Product

Do you want to continue? [YES]
Configuration phase starting ...

You will be asked to choose options, if any, for each selected product and for
any products that may be installed to satisfy software dependency requirements.

HP AXPVMS IDESERVER V6.5: OpenVMS IDE Server

The IDE Server includes the JAR files for Jakarta Ant.
You must agree to the terms of the Ant license agreement
in order to use the IDE Server.

Press return to display the license

/*
 *                                 Apache License
 *                           Version 2.0, January 2004
 *                        http://www.apache.org/licenses/
 *   ...
I have read and accept the above license.
```

```
[Y = I Accept, N = I Reject]: y

* This product does not have any configuration options.
    The installation will now continue without requesting further user input.

Execution phase starting ...

The following product will be installed to destination:
    HP AXPVMS IDESERVER V6.5           DISK$INT83:[VMS$COMMON.]

Portion done: 0%...10%...20%...40%...50%...60%...70%...80%...90%
%PCSI-I-PRCOUTPUT, output from subprocess follows ...
%INSTALL-W-NOPREV, no previous entry exists - new entry created for
NTBEAN$DKA100:[SYS0.SYSCOMMON.][IDE$SERVER.SYSLIB]IDE$VMS_AUTH_MOD.EXE;1
%INSTALL-W-NOPREV, no previous entry exists - new entry created for
NTBEAN$DKA100:[SYS0.SYSCOMMON.][IDE$SERVER.SYSLIB]IDE$J2VMS_SHR.EXE;1
%INSTALL-W-NOPREV, no previous entry exists - new entry created for
NTBEAN$DKA100:[SYS0.SYSCOMMON.][IDE$SERVER.SYSLIB]IDE$DBGLIBSHR.EXE;1

Portion done: 100%

The following product has been installed:
    HP AXPVMS IDESERVER V6.5           Layered Product

HP AXPVMS IDESERVER V6.5: OpenVMS IDE Server


    Insert the following lines in SYS$MANAGER:SYSTARTUP_VMS.COM:
        @SYS$STARTUP:IDE$STARTUP.COM
    Insert the following lines in SYS$MANAGER:SYSHUTDWN.COM:
        @SYS$STARTUP:IDE$SHUTDOWN.COM

    ACCOUNT QUOTAS

    The IDE Server requires the modifications to system parameters as follows:
      System parameter CHANNELCNT must be greater than or equal to 2000

    USER ACCOUNTS that will use Distributed NetBeans will require quotas as
    follows in order for the IDE$USER server to start:

      WSEXTENT greater than or equal to 30000
      JTQUOTA greater than or equal to  60000
      PGFLQUO greater than or equal to  500000

    Higher values of other quotas may be required depending on the commands you
    will be executing in your IDE$USER server.

     KEYSTORE CONFIGURATION

    The keystore for SSL uses a default account and password.  If you would
    like to modify these values, please see the Release Notes for information
    on changing the keystore values.
$
```

4 After Installing Distributed NetBeans

IDE Server Startup and Shutdown

After you install the IDE Server, add the following line to SYS$STARTUP:SYSTARTUP_VMS.COM:

```
$ @SYS$STARTUP:IDE$STARTUP.COM
```

Then add the following line to SYS$MANAGER:SYSHUTDWN.COM:

```
$ @SYS$STARTUP:IDE$SHUTDOWN.COM
```

Important: Execute the IDE$STARTUP.COM command procedure only from the SYSTEM account.

Accounts, Quotas, and System Parameters

Following are the quotas for the remote user account. (This is not the IDE$SERVER account, but the account that you specify when you create a remote server, called IDE$USER, from within the Distributed NetBeans client.)

Important: If you have DISK QUOTAS enabled on the disk on which IDE Server is installed, you must grant the IDE$SERVER account a disk quota of at least 200,000 blocks. In addition, you must grant each USER ACCOUNT that will be used by Distributed NetBeans a disk quota of at least 100,000 blocks on the disk on which the IDE Server is installed.

Default Quotas assigned when OpenVMS account is created.
Minimum Minimum value required for Distributed NetBeans to run.
Recommended Recommended value for optimal performance of Distributed NetBeans.

User Account Quota	Default	Minimum	Recommended
WSDEF	2000	2000	2000
WSEXTENT *	16,384	30,000	30,000
FILLM	100	100	500
BIOLM	150	150	512
DIOLM	150	150	512
ASTLM	250	250	300
TQELM	10	10	400
BYTLM	64,000	64,000	64,000
JTQUOTA *	4096	60,000	60,000
PGFLQUO *	50,000	500,000	500,000

* Manually increase these quotas.

The IDE Server installation creates an account IDE$SERVER and a rights identifier (IDE$SERVERRI). The IDE$SERVER account is created with the following user quotas:

```
PRIVILEGES=TMPMBX,NETMBX,PRMMBX)
ASTLM=300
BIOLM=1024
BYTLM=2000000
DIOLM=1024
ENQLM=2000
FILLM=512
JTQUOTA=60000
```

```
PGFLQUOTA=1500000
PRCLM=10
TQELM=400
WSEXTENT=524288 (Be sure SYSGEN parameter WSMAX is large enough to
                 allow this)
WSDEF=2000
```

Logical Names

Following are the logical names that can be used to control the IDE Server.

- IDE$ALLOW_EXTAUTH – This logical causes the IDE Server to ignore the ExtAuth flag and try local authentication using your password from the SYSUAF file.

- IDE$JDK_VERSION – This logical forces a particular version of the Java SDK to be used by specifying the version number. For example:

```
$ DEFINE/SYSTEM IDE$JDK_VERSION 150   ! Use Java 1.5.0
```

Note: You must restart the IDE Server after changing the IDE$JDK_VERSION logical name.

- IDE$HOST_IPNAME – If you have multiple Ethernet cards on your OpenVMS system, this logical allows you to choose which card the IDE Server uses for registration in the Java RMI registry. Set the logical in the SYSTEM table to the IP address or IP hostname of the card you choose. If you have multiple cards and you do not set this logical, the results are unpredictable.

For example:

```
$ DEFINE/SYSTEM IDE$HOST_IPNAME bugsy.malone.gangsters.com
```

- IDE$RMI_PORT – This logical defines the RMI port to be used. By default, 1099 is used. If this logical is defined, the value of the logical will be used as the port number. For example, if you enter the following command, the IDE Server will use port 999 for RMI communications:

```
$ DEFINE IDE$RMI_PORT 999
```

Note: If you want to redefine the IDE$RMI_PORT logical, it needs to be done in the SYSTEM logical name table.

- IDE$VERBOSE_LOG – This logical turns on verbose logging in the IDE Server.

The IDE Server startup procedure creates the following logicals in the system logical name table.

Logical Name	Location	Description
IDE$ROOT	< PCSI installation destination>	Top level IDE Server directory (PCSI installation destination)
IDE$ANT_HOME	IDE$ROOT:[IDE$SERVER.ANT]	Distributed Ant files. The use of this logical name is deprecated. Please use IDE$JDK_VERSION to set the Java version to be used by the IDE Server.
IDE$ANT_ROOT	IDE$ROOT:[IDE$SERVER.ANT.]	Root directory of Ant files
IDE$CMS	IDE$ROOT:[IDE$SERVER.CMS]	Distributed CMS support files
IDE$COM	IDE$ROOT:[IDE$SERVER.COM]	Command procedures
IDE$DOC	IDE$ROOT:[IDE$SERVER.DOC]	Documentation
IDE$JARS	IDE$ROOT:[IDE$SERVER.JARS]	JAR files for the IDE Server

IDE$JARS_ROOT	IDE$ROOT:[IDE$SERVER.JARS.]	Rooted logical for JAR files
IDE$JAVA_ROOT	Varies	Root of Java files
IDE$LIB	IDE$ROOT:[IDE$SERVER.SYSLIB]	Shareable images used by the IDE Server
IDE$LOGS	IDE$ROOT:[IDE$SERVER.LOGS]	Logs from the IDE Server processes
IDE$SCRATCH	IDE$ROOT:[IDE$SERVER.SCRATCH]	Scratch directory
IDE$STORES	IDE$ROOT:[IDE$SERVER.STORES]	Keystore and truststore files
IDE$SYSTEM	SYS$SYSTEM	System files

The IDE$SERVER process writes log files into the IDE$LOGS directory.

5 Release Notes

- Version Renumbered

  Distributed NetBeans 6.5.1 for OpenVMS was the last release on which NetBeans 6.5 was supported. The current release, Distributed NetBeans Version 6.5.2, supports NetBeans 6.5 only. Therefore, Distributed NetBeans has been renumbered to Version 6.5.2.

- Support for NetBeans 6.5.1 Discontinued

  Distributed NetBeans 6.5.1 for OpenVMS was the last release in which NetBeans 6.5 was supported.

- Supported SMB Products

  The supported SMB products on the OpenVMS machine are Advanced Server, and HP OpenVMS Common Internet File System (CIFS) Version 1.0, based on Samba V3.0.24. Earlier versions of Samba are not supported. The share on the remote OpenVMS machine must be a STREAM_LF share.

- File Extension of .nbm Must Be Lowercase

  The downloaded .nbm file must have an extension of nbm, and the case must match exactly. If the extension (nbm) is not in lowercase, the module will not install correctly and NetBeans will get into an installation/update loop.

  - Interactions with the NetBeans C/C++ Development Pack

    The NetBeans C/C++ Development Pack can be installed with the Distributed NetBeans client plug-in. The NetBeans C/C++ Development Pack takes precedence over the Distributed
    NetBeans C/C++/Fortran/Bash support when both plug-ins are installed.

    Therefore, the following remote actions are disabled for C/C++/Fortran/Bash files when the NetBeans C/C++ Development Pack is installed: Remote Compile, Remote Execute (from Bash file), Remote Properties. Remote Execute for DCL command procedures and Ant scripts can be used instead of Remote Compile in these cases.

  - Java Source Version on Desktop and IDE Server Must Be Compatible

    When you convert a local Java project to a remote project, Distributed NetBeans checks that the JVM version used on your desktop system and IDE Server are compatible. You

cannot convert your project to a remote project until the Java project and IDE Server are using compatible JVMs.

To change the Source Level for your project, select the project tab. Right click on your project and select Properties. Set the proper source level from the Source Level dropdown menu. The Java source level should be less than or equal to the version of Java with which you are running the IDE Server on OpenVMS.

- EDT Keypad Disabled by Default

  To set the keypad on your keyboard to adopt EDT keypad behavior, you must manually enable it. From the Tools menu, select Options, the press the keymap button on the left. Select edtkeypad from the Profile: drop down menu.

- OpenVMS Directory and Filenames Containing Spaces Are Not Supported

  Do not choose directory names containing spaces on OpenVMS. Spaces in directory names are not supported in Ant on OpenVMS. (Distributed NetBeans uses Ant to build projects.)

- Default Java SDK Version
  The IDE Server requires Java SDK version 1.4.2-7 (or higher) on OpenVMS Alpha and Integrity servers. By default, the IDE Server assumes that Java v 1.4.2 is installed on the system and the server attempts to use that version of the SDK.

  To force the server to use a particular version of the SDK, define the logical IDE$JDK_VERSION to a three-digit version number of the SDK you want to use (for example, 150).

  For example, entering the following command causes the IDE Server to be started using the SDK (in this case, v 1.5.0) contained in the tree whose root is SYS$COMMON:[JAVA$150]:

  ```
  $ DEFINE IDE$JDK_VERSION 150
  ```

  User processes that are started by the IDE Server also use this logical to choose the Java version. You must restart the IDE Server after changing the IDE$JDK_VERSION logical name.

- Define IDE$ALLOW_EXTAUTH Logical for Users with ExtAuth Flag Set in SYSUAF Record

  The IDE Server does not support external authentication. If you have the ExtAuth flag set in your SYSUAF user record, you must define the system logical name IDE$ALLOW_EXTAUTH to cause the IDE Server to ignore the ExtAuth flag and try local authentication using your password from the SYSUAF file (these are usually synchronized with Advanced Server).

  If the logical is defined (with any value) then the check for the ExtAuth flag is disabled. If the logical is not defined, then the SYSUAF record is checked for the ExtAuth flag and the Remote Server connection will fail from within the Distributed NetBeans client.

  HP recommends that you define the logical in the SYSTEM table to ensure that it is visible to the IDE Server process.

- JSSE Keystore and Truststore

  The IDE server uses JSSE (Java Secure Socket Extension) for secure network connections. Configuring the JSSE's Keystore and Truststore for the IDE server requires running IDE$STORES:IDE$CONFIG.EXE. It will encrypt the user provided information and store it as IDE$STORES:IDE$KEYDATA.

  The IDE server is shipped with a preconfigured IDE$STORES:IDE$KEYDATA which assumes IDE$STORES:IDE$_KEYSTORE and IDE$STORES:IDE$_TRUSTSTORE as the Keystore and Truststore, respectively.

  IDE$STORES:IDE$_KEYSTORE and IDE$STORES:IDE$_TRUSTSTORE were created with JDK's keytool and preconfigured to use with the IDE server. The password to access them is _keystore.

- IDE$SERVER and IDE$USER Processes on OpenVMS

  At system startup, the SYS$STARTUP:IDE$STARTUP.COM command procedure creates a process named IDE$SERVER, which runs in the IDE$SERVER account. The IDE$SERVER process starts a subprocess named IDE$RMIREG for handling RMI. Both of these processes are detached processes.

  When you create a remote server inside NetBeans running on your desktop, the NetBeans client contacts the IDE$SERVER process running on the OpenVMS machine. The IDE$SERVER process authenticates the user account login information you supplied, and creates a detached process running in your user account on the OpenVMS machine. This process is named IDE$USER_xxxxxx, where xxxxxx is a unique identifier. The IDE$USER_xxxxx process is then fed DCL commands by the NetBeans client running on your desktop.

  Because the IDE$USER process is running detached, it may not obtain all of the symbol and logical name definitions that you defined in your SYLOGIN.COM and LOGIN.COM files. A detached process has an F$MODE() of OTHER. SYLOGIN.COM has sections for each different process mode, and a GOTO at the beginning of the file. When a process has an F$MODE() of OTHER, the GOTO may bypass some important DCL commands. This is also a common DCL programming practice in LOGIN.COM.

  HP recommends that you examine your SYLOGIN.COM and LOGIN.COM procedures to make sure that detached processes obtain the proper symbol and logical name definitions.

- Remote Command Execution and Privileges

  Remote commands are not executed in a process that has the AUTHORIZED privilege mask from the remote user server.

  The IDE$SERVER starts a detached user server process logged in to the account you specify when you create the remote server in NetBeans on your Distributed NetBeans desktop machine. This detached process spawns subprocesses to execute commands (at your control) on the OpenVMS machine. The spawned subprocess is given only the privileges that were enabled when the user server spawned the subprocess.

  If you need extra privileges to execute commands in a DCL file, you must enable them in your user server process. You can do this by modifying your LOGIN.COM file to turn on the required privileges. You can restrict this action by turning on privileges only if your

process name begins with IDE$USER_ or by checking the f$mode() of the process. (All Distributed NetBeans servers are detached, so the f$mode() == "OTHER".)

- Using Ant Outside of Distributed NetBeans

  Apache Ant version 1.6.5 is included with the IDE Server. This version of Ant has been patched to work on OpenVMS.

  The logical IDE$ANT_HOME points to the root directory of the Ant files for OpenVMS. This directory contains the command procedure IDE_ANT.COM. If you define a symbol that points to this command procedure, you can issue Ant commands to DCL. For example:

```
$ @sys$manager:java$142_setup fast
$ ant :== @ide$ant_home:ide_ant.com
$ ant "-version"
Apache Ant version 1.6.5 compiled on July 14 2006
$
```

- Multiple Ethernet Cards on IDE Server

  If you have multiple Ethernet cards on your OpenVMS system, you must choose which card the IDE Server uses for registration in the Java RMI registry. Set the IDE$HOST_IPNAME logical in the SYSTEM table to the IP address or IP hostname of the card you choose. For example:

```
$ DEFINE/SYSTEM IDE$HOST_IPNAME bugsy.malone.gangsters.com
```

  If you have multiple cards and you do not set this logical, the results are unpredictable.

    - Multiple Ethernet Cards on Desktop Machine

  Having more than one IP address or hostname on your desktop machine can cause the connection to the IDE Server to fail. To solve this problem, choose a host name or IP address for your client machine and set the RMI hostname property on the command line used to launch NetBeans as follows:

```
-J-Djava.rmi.server.hostname=<host name or ip address>
```

- C/C++ Error Marking

  Errors in C/C++ source files are marked with red underlining and a red x in the margin. These error markings are cleared only if you modify the line they mark.

- Process Termination from Services Tab

  Explicitly terminating a process from the NetBeans Services tab sometimes does not stop the corresponding remote process on the server.

- Open Files in Editor Delays Subsequent Startup

  If you exit NetBeans on your desktop with several files from the remote OpenVMS system open in the editor, your startup time when you next invoke NetBeans will be longer than usual. At startup, NetBeans restores the state of the previous editing session, which includes opening all of the files that were open when you last exited NetBeans.

6 Known Problems and Restrictions in the IDE Server and Distributed NetBeans Client

Following are the known problems and restrictions in Distributed NetBeans Version 6.5.2:

- Debugging of Java files cannot be performed with Java 6. This is the known issue in Java 6.

- CMS support is not provided.

- Error message “package com.sun.crypto.provider does not exist.”

  If you see this message on OpenVMS Integrity servers or OpenVMS Alpha running Java 1.4.2-23 or higher, rename the jar files in IDE$JAVA_ROOT[JRE.LIB.EXT] to all lowercase. This is a known OpenVMS Java problem.

- A remote project cannot be created in a directory containing an NBPROJECT folder.

  Distributed NetBeans will not allow a directory containing this folder to be chosen as the remote FTP root of a remote project. When this occurs, the Next and Finish buttons will be grayed out in the wizard until a suitable remote root directory is selected. An error message is returned that explains why the remote project cannot be created.

- The SYS$LOGIN directory cannot be chosen as the remote root for a new remote project. An error message is returned that explains why the remote project cannot be created.

- In the JSP Sample project, after conversion to remote, the project does not build. The error "Use a fileset to copy directories" is returned from Ant.

- EXE and OBJ files are non-editable in the IDE, but they are not marked as non-editable.

- If you have DISK QUOTAS enabled on the disk on which IDE Server is installed, you must grant the IDE$SERVER account a DISK QUOTA of at least 200,000 blocks.

- Router using NAT times out.

  If the Distributed NetBeans client initiates the connection to the remote server via a router that uses Network Address Translation (NAT), the connection attempts will time out. This happens because the Java RMI implementation obtains the virtual IP address (private IP address) of the client from the IP packet body, and not from the actual address in the IP packet header.

  The workaround for this problem is as follows:

  Set the java system property and make sure the <server_host_name> is correctly resolvable on both sides of the router. If you do not set this property, or the related java.rmi.server.useLocalHostname property, the RMI server will by default pick up the server machine's IP address (inside the NAT), which is meaningless to the client.

  ```
  java.rmi.server.hostname="<server_host_name>"
  ```

  For more information, see the *Java RMI FAQ* at http://java.sun.com/j2se/1.4/docs/guide/rmi/faq.html#nethostname.

This means that you should set this property on both the PC and the OpenVMS machine. On the PC, you can modify the shortcut you use to start NetBeans to add (on the java command line):

```
-Djava.rmi.server.hostname="<your_PC_IP_address>"
```

On the OpenVMS machine, set the logical IDE$HOST_IPNAME as follows, and restart the IDE Server by entering:

```
$ define/system IDE$HOST_IPNAME your_openvms_ip_address
$ set def sys$manager
$ @sys$startup:ide$shutdown
$ @sys$startup:ide$startup
```

For more information, see the *Sun/Java RMI FAQ* at http://java.sun.com/j2se/1.4.2/docs/guide/rmi/faq.html.

- Before closing the NetBeans IDE, disconnect it from the IDE server. Otherwise, the IDE server on the VMS machine may need a restart.

- When you are performing remote operations on files present in a JAVA project, you may get the following error:
"`The <delete> type doesn't support nested "files" element`".

  To correct this problem, replace the existing tag with the following in build-impl.xml.

```
                <delete>
                    <files includes="${javac.includes.binary}"/>
                </delete>
```

To

```
                <delete>
                    <fileset dir="@{destdir}"
includes="${javac.includes.binary}"/>
                </delete>
```

  The reason for this is because ANT Version 1.6.5 does not support `<files>` tag inside the `<delete>` tag.

- When a remote project is closed, FTP File System Node still displays the FTP File system. To close the FTP File System, right-click on the FTP File system node and select **Exit**.

- In Windows 7 and Windows Vista with real-time protection on the FTP, process will be very slow. This is a known issue of NetBeans. During real-time protection, Windows system resets the FTP connection.

- A project directory on local as well as on remote cannot have another project inside it.

- The Remote project icon does not appear on the Remote Java project, when the project is converted using FTP File System in the **Projects** tab. But, the icon appears in the **Files** tab.

7 Problems Corrected in the IDE Server and Distributed NetBeans Client

Following are the problems corrected in this release:

- Problems while creating WSIT templates. This problem has been corrected and a new feature for creating WSIT project is now available.
- The files which are not listed in the ASCII or binary list is transferred in binary mode. This problem has been corrected and the default FTP mode is modified from binary to ASCII mode.
- When the IDE server is disconnected and an attempt is made to debug the 'Remote Java' project, it does not display the warning message. This problem has been corrected to display the warning message.
- Debugging the remote project generates dbgstart*.com files in the SYS$SYSROOT:[SYSMGR] remote directory, which are not removed automatically. This problem has been corrected and these files can be removed automatically.
- In earlier versions, there is no option to add new source directories to the remote 3GL and WSIT projects. This problem has been corrected and additional source directories can be added to the existing remote projects.
- COBOL auto-indentation and reformatting in the editor Window does not work as expected and this has been corrected.
- FORTRAN code indentation does not work as expected and this has been corrected.
- Re-selecting the IDE server does not reflect while selecting remote directory and this has been corrected.

8 Software Support

On OpenVMS Alpha:

Support for Distributed NetBeans is provided by HP under OpenVMS Alpha service agreements through standard support channels.

Download is an official distribution mechanism for Distributed NetBeans, including updates in addition to the OpenVMS Alpha media kit.

Source code kits are provided in the spirit of the open source community, but are not supported by HP.

On OpenVMS Integrity servers:

Support for Distributed NetBeans is provided by HP under OpenVMS Integrity servers Foundation Operating Environment (FOE) service agreements through standard support channels.

Download is a courtesy distribution mechanism for Distributed NetBeans. Kits or updates other than security patch kits obtained via download are unsupported.

The OpenVMS Integrity servers Operating Environments media kit is the official distribution mechanism for Distributed NetBeans. Supported kits and updates must be obtained from this mechanism or from software product update services.

A variety of service options are available from HP Support. For more information, contact your local HP account representative or distributor. Information is also available from Software Support Services.

General NetBeans support is provided by the NetBeans user group at http://blog.gmane.org/gmane.comp.java.ide.netbeans.user. You can informally exchange information with other users in the OpenVMS newsgroup `comp.os.vms`.

To contact the NetBeans for OpenVMS engineering team, please send mail to NetBeans@hp.com.