

Release Notes for iPlanet Compass Server

Version 3.01C, Service Pack 1

Updated March 1, 2002

The *Release Notes for iPlanet™ Compass Server, Version 3.01C, Service Pack 1* document important information available at the time of release.

NOTE If you have previously installed iPlanet Portal™ Server: Personalized Knowledge Services 3.01C, refer to the *Release Notes for iPlanet Portal Server: Personalized Knowledge Services 3.01C, Service Pack 1*.

The information in this document includes:

- What's New in Compass Server
- Software and Hardware Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
- Where to Find More Information

Read this document before you begin installing Service Pack 1. For an online version of this and other Compass Server, Version 3.01C documentation, see the iPlanet documentation Web site at:

<http://docs.iplanet.com/docs/manuals/>

After you install and start using Compass Server, Version 3.01C, Service Pack 1, check this Web site periodically to view the most up-to-date documentation.

What's New in Compass Server

iPlanet Compass Server provides automated crawling and indexing of file systems and Web sites. Users can search popular formats and can search by information categories, not just keywords.

iPlanet Compass Server, Service Pack 1 includes the following changes:

- In the `logs` directory, the `searchengine.log` file, which displays the search engine's progress in indexing, replaces the `nsirmgr.log` file.
- These additional file formats can be indexed for search:
 - StarOffice™ Writer
 - StarOffice Impress
 - StarOffice Calc
 - FrameMaker
- Single quotation marks used in the Search field now are string delineators. Previously, single quotation marks functioned as a `STEM` operator.
- Installation of the `xpdf` file format utility is no longer required.
- Some internal components are updated. Search functions have not changed, and administrators and users are not affected.

Software and Hardware Requirements

The Compass Server software has several recommended system requirements that you should meet before you start your installation. These are in addition to requirements for other products that you use in conjunction with Compass Server.

This section explains what these recommendations are.

Operating Environments

Compass Server is available for the following platforms:

- Solaris™ Operating Environment (SPARC™ Platform Edition) 2.6 (32-bit mode)
- Solaris Operating Environment (SPARC Platform Edition) 8 (32-bit and 64-bit modes)
- Windows NT 4.0 with SP6 for standalone installations

Memory

The minimum memory recommended for all platforms is the following:

- 512 MB RAM for Portal Server installations
- 256 MB RAM for standalone installations

Requirements vary according to the size of your database.

Disk Space

The minimum disk space recommended for all platforms is 500 MB. Requirements vary according to the size of your database.

Software

Compass Server requires the following:

- iPlanet Portal Server 3.0, Service Pack 3, or iPlanet Portal Server 3.0, Service Pack 3a, or iPlanet Portal Server 3.0, Service Pack 4

NOTE If you previously installed Compass Server with iPlanet™ Web Server rather than Portal Server, you can install this version of Compass Server with iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9.

- An LDAP server, to implement authentication

Web Browsers

Compass Server is compatible with the following browsers:

- Netscape™ Communicator 4.06 to 4.79 (except 4.6) for administration and for end users
- Microsoft Internet Explorer 4.0 or higher for end users

Browsers must support Javascript™, JVM™ 1.1, and cookies.

Installation Notes

This section tells you how to install iPlanet Compass Server, Service Pack 1. It contains the following topics:

- Installing on Solaris
- Installing on Windows
- Post-installation Steps
- Uninstalling from Solaris
- Uninstalling from Windows

NOTE If your Portal Server deployment has multiple platform servers and gateways, identify where you plan to install Compass Server before you begin.

Installing on Solaris

Before you begin installing Compass Server, Version 3.01C, Service Pack 1, complete the following steps:

1. Install iPlanet Portal Server.

TIP You can install Compass Server on an existing Portal Server machine or on a separate machine.

For a high traffic portal, or a portal where Compass Server is heavily used, dedicating a machine for Compass Server is advised.

This software is available at this Web site:

<http://www.iplanet.com/downloads/download/>

NOTE You must have a license for iPlanet Portal Server.

The installation instructions are in the *iPlanet Portal Server 3.0 Release Notes* document for the service pack level you are installing. This is available at this Web site:

<http://docs.ipplanet.com/>

2. Execute the following command to stop Portal Server:

```
/etc/init.d/ipsserver stop
```

3. Execute the following command to stop the gateway, if it is installed:

```
/etc/init.d/ipsgateway stop
```

You can obtain the Compass Server software for Solaris from the CD-ROM. To install Compass Server using the Compass Server CD-ROM, complete the following steps:

1. Insert the CD-ROM and use the `cd` command to change to the directory where the SUNWipcs package is.
2. Change to root using the `su root` command.
3. Execute the following command:

```
pkgadd -d . SUNWipcs
```
4. At the Do you agree to the license terms? prompt, type `yes`.
5. Accept the default installation path for the package base directory, or specify another one.
6. Select `yes` to confirm the installation path.
7. Select `yes` to install Compass Server.

TIP Compass Server installation is done when this message appears:

```
Installation of <SUNWipcs> was successful.
```

8. Execute the following command to start Portal Server:

```
/etc/init.d/ipsserver start
```

9. Execute the following command to start the gateway, if it is installed:

```
/etc/init.d/ipsgateway start
```

Installing on Windows

You can obtain the Compass Server software for Windows from the CD-ROM. To install Compass Server using the CD-ROM, complete the following steps:

1. Verify that iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9 is installed.
2. Verify that the Web Server is on.
3. Insert the CD-ROM and change to the `winnt` directory.
4. Run the `setup.exe` file, and at the `This will install Compass Server 3.01c SP1. Do you wish to continue?` prompt, select `yes`.
5. Read the `license agreement` and select `Continue`.
6. Accept the default destination directory for your installation, or specify another one.

To install the Compass Server on a Pentium 4 machine, complete the following steps:

1. Install Java™ Development Kit 1.2.2_10 and note the path where the `jdk1.2.2` directory is installed.
2. Go to `install_path\netscape\server4\bin\https\`.
3. Replace the `jre` directory with the `jre` directory under `jdk1.2.2`.

Post-installation Steps

Once the installation is completed, you must:

- Create a new Web Server instance for your Compass Server plug-in
- Install the Compass Provider, if you wish to display a Compass channel on your portal site (for Solaris installations)

Creating a New Compass Server Instance

To create a new Compass Server instance on your portal, complete the following steps:

1. Log on to the iPlanet Web Server administration console.

TIP The default location is `http://server_name:8088`

2. Select `Add Server`.

3. Provide the information, including a user name and a unique port number and server identifier (for example: `compass`).

NOTE The `username` value must be uniform for all instances of Compass Server.

4. Follow the link to Configure more options in your server.
5. Select the Preferences/Compass Admin tab.
6. Select the Compass Server Setup button.
7. Follow the steps in the wizard to complete the basic configuration.

TIP Once you enable the Compass Server plug-in, you can access Compass Administration via the Preferences/Compass Admin tab in the Web Server Manager.

Installing the Compass Provider

If you install Compass Server on Solaris, the Compass Provider displays a Compass channel on the Portal Server desktop. Portal Server controls administration of this channel.

To install the Compass Provider, complete the following steps:

1. From the `compass_directory/plugins/compass/samples/portal` directory where you installed Compass Server, run the installation script.
2. When you are prompted, provide the following information:
 - The Portal Server installation path.

TIP The default installation path is `/opt`.

- The Compass Server instance. Enter the full server, domain and port for your Compass Server. For example: `http://compass.iplanet.com:1234`
 - The name of the domain you want to add the Compass Provider to.
3. If you have multiple Portal Server instances, copy the Compass Provider installation files to each Portal Server machine and repeat Step 1 and Step 2 for each Portal Server.

NOTE The Compass Search channel is installed as a default provider. It is automatically available to end users unless they remove it by modifying the profile.

If a user modifies the profile, the user can later add the Compass Search channel to the Portal Server desktop by selecting the Content link and selecting the Compass Search check box.

Uninstalling from Solaris

Compass Server requires a manual uninstall procedure for Solaris. This section explains how to remove an installation of Compass Server from iPlanet Portal Server or iPlanet Web Server.

To uninstall Compass Server from Solaris, complete the following steps:

1. Turn off all instances of Compass Server via the Compass administration console.
2. Remove all Compass Server instances.

From the Web Server Administration, choose Remove Server for the Web Server instances that you have upgraded to Compass.

3. Use `pkgrm SUNwipcs` to uninstall the Compass Server package.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Uninstalling from Windows

Compass Server requires a manual uninstallation procedure for Windows. This section explains how to remove an installation of Compass Server.

You can remove most Compass Server files on Windows NT manually. To do so:

1. Stop all instances of Compass Server.
2. Stop Web Server.
3. Delete all files under the `drive:\compass_directory\plugins\compass` directory.

4. Delete all Create Compass instances.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Documentation Notes

This section provides additional documentation for Compass Server. It contains the following topics:

- Performance Tuning
- Characters in Taxonomy

Performance Tuning

After you install the iPlanet Compass Server software, you can configure your software to achieve optimum performance. Factors affecting performance include traffic volume, the number of open files, heap sizes, garbage collection, available threads, and cache size affect. You can reset various parameters to improve Compass Server performance.

This section includes information about using the following parameters:

- Solaris Parameters
- Web Server Parameters
- Restricting Search Look-Up Time

Solaris Parameters

You can change TCP network connection parameters and buffer parameters to accommodate high traffic volumes.

To adjust Solaris parameters, complete the following steps:

1. To accommodate high traffic volumes, reset TCP network connection parameters and buffer parameters when the machine is rebooted. Place the parameters in a startup script in the `/etc/rc2.d` directory with executable permission. An example of a name for a startup script is `S99nddtuning`.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>ndd -set /dev/tcp tcp_time_wait_interval 240000 30000</code>	Reduces time between completion of events to 30000 from 240000.
<code>ndd -set /dev/tcp tcp_conn_req_max_q 128 1024</code>	Increases maximum number of connections with completed three-way handshake to 1024 from 128.
<code>ndd -set /dev/tcp tcp_conn_req_max_q0 1024 4096</code>	Increases maximum number of connections with handshake incomplete to 4096 from 1024.
<code>ndd -set /dev/tcp tcp_slow_start_initial 1 2</code>	Increases transmission speed of small amounts of data to 2 from 1.
<code>ndd -set /dev/tcp tcp_xmit_hiwat 8129 32768</code>	Increases the size of the transmit buffer to 32768 from 8129.
<code>ndd -set /dev/tcp tcp_recv_hiwat 8129 32768</code>	Increases the size of the receive buffer to 32768 from 8129.

2. To accommodate large numbers of open files, sockets and pipes during database indexing and searching, reset file descriptor and stream driver queue parameters in the `/etc/system` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>rlim_fd_max 8192</code>	Sets the maximum limit for processing open file descriptors to 8192.
<code>rlim_fd_cur 8192</code>	Sets maximum limit on open file descriptors for a single process to 8192.
<code>sq_max_size 0</code>	Controls the size of the streams driver queue. Set this to 0 so that performance runs are not affected by lack of buffer space. Set this on clients also.

For more information about Solaris parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

Web Server Parameters

You can change Web Server Java virtual machine parameters to control heap sizes, memory use, and number of available threads for incoming requests.

To adjust Web Server parameters, complete the following steps:

1. To index more than 100,000 documents with sizes ranging from 10 KB to 100 KB, increase initial and maximum heap sizes for the Web Server's Java Runtime Environment in the `config/jvm12.conf` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>jvm.minHeapSize=64000000</code>	Sets initial heap size for the Web Server JRE to 64 MB.
<code>jvm.maxHeapSize=512000000</code>	Sets maximum heap size for the Web Server JRE to 512 MB.

2. To reclaim memory allocated to pooled storage, modify the `JAVA_ARGS` garbage collection parameter.

The syntax for this option is:

```
-Xgenconfig:initial_size,max_size,algorithm:initial_size,max_size,algorithm
```

For example:

```
jvm.option=-Xgenconfig:64m,64m,semispaces:64m,512m,markcompact
```

This variable's default value is `#jvm.option=-Xrunoii`. The value you select depends on the application's requirements and the amount of memory in the server. To identify how much memory is used for garbage collection, add `-verbose:gc` to `JAVA_ARGS`.

NOTE The garbage collection option does not work on Windows NT 4.0 SP6.

3. To increase the number of available threads for processing incoming requests for Web Server, change the `MaxThreads` parameter in the `config/magnus.conf` file. For example:

```
MaxThreads 128
```

For more information about Web Server parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

For more information about garbage collection tuning, see the *Tuning Garbage Collection* document at:

<http://java.sun.com/docs/hotspot/>

Restricting Search Look-Up Time

Administrators can use the `search-lookup-limit` parameter in the `config/csid.conf` file to restrict look-up time so that users do not over-tax a Compass Server machine by executing queries that are not defined correctly. (Using `?`, `?*` or `??*` in a search string are examples of incorrect queries.) For example:

```
search-lookup-limit=-1
```

The default value, which is `-1`, allows unrestricted lookup time. The time unit is in milliseconds.

Characters in Taxonomy

Characters allowed in Compass Server's taxonomy, in addition to the alphanumeric character set, include the following:

- !
- &
- ,
- -
- .
- /
- ?
- _

In addition, a blank space () is allowed for separating two words (for example: `portal site`).

Known Problems and Limitations

This section lists known problems with this release of iPlanet Compass Server.

iPlanet Compass Server does not support double-byte character sets, such as Japanese, Korean and Chinese.

Workaround:

None.

How to Report Problems

If you have problems with iPlanet Compass Server, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at
http://www.iplanet.com/support/support_services_10_0.html

From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact customer support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Where to Find More Information

Useful iPlanet information can be found at the following Internet locations:

- **iPlanet release notes and other documentation** — <http://docs.iplanet.com/docs/manuals/>
- **iPlanet product status** — http://www.iplanet.com/support/technical_resources/
- **iPlanet Professional Services information** —
http://www.iplanet.com/services/professional_services_3_3.html
- **iPlanet developer information** — <http://developer.iplanet.com/>
- **iPlanet learning solutions** — <http://www.iplanet.com/learning/index.html>
- **iPlanet product data sheets** —
http://www.iplanet.com/products/product_map/product_name_2_0a.html

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NOTE If you have previously installed iPlanet Portal™ Server: Personalized Knowledge Services 3.01C, refer to the *Release Notes for iPlanet Portal Server: Personalized Knowledge Services 3.01C, Service Pack 1*.

The information in this document includes:

- What's New in Compass Server
- Software and Hardware Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
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What's New in Compass Server

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iPlanet Compass Server, Service Pack 1 includes the following changes:

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- These additional file formats can be indexed for search:
 - StarOffice™ Writer
 - StarOffice Impress
 - StarOffice Calc
 - FrameMaker
- Single quotation marks used in the Search field now are string delineators. Previously, single quotation marks functioned as a `STEM` operator.
- Installation of the `xpdf` file format utility is no longer required.
- Some internal components are updated. Search functions have not changed, and administrators and users are not affected.

Software and Hardware Requirements

The Compass Server software has several recommended system requirements that you should meet before you start your installation. These are in addition to requirements for other products that you use in conjunction with Compass Server.

This section explains what these recommendations are.

Operating Environments

Compass Server is available for the following platforms:

- Solaris™ Operating Environment (SPARC™ Platform Edition) 2.6 (32-bit mode)
- Solaris Operating Environment (SPARC Platform Edition) 8 (32-bit and 64-bit modes)
- Windows NT 4.0 with SP6 for standalone installations

Memory

The minimum memory recommended for all platforms is the following:

- 512 MB RAM for Portal Server installations
- 256 MB RAM for standalone installations

Requirements vary according to the size of your database.

Disk Space

The minimum disk space recommended for all platforms is 500 MB. Requirements vary according to the size of your database.

Software

Compass Server requires the following:

- iPlanet Portal Server 3.0, Service Pack 3, or iPlanet Portal Server 3.0, Service Pack 3a, or iPlanet Portal Server 3.0, Service Pack 4

NOTE If you previously installed Compass Server with iPlanet™ Web Server rather than Portal Server, you can install this version of Compass Server with iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9.

- An LDAP server, to implement authentication

Web Browsers

Compass Server is compatible with the following browsers:

- Netscape™ Communicator 4.06 to 4.79 (except 4.6) for administration and for end users
- Microsoft Internet Explorer 4.0 or higher for end users

Browsers must support Javascript™, JVM™ 1.1, and cookies.

Installation Notes

This section tells you how to install iPlanet Compass Server, Service Pack 1. It contains the following topics:

- Installing on Solaris
- Installing on Windows
- Post-installation Steps
- Uninstalling from Solaris
- Uninstalling from Windows

NOTE If your Portal Server deployment has multiple platform servers and gateways, identify where you plan to install Compass Server before you begin.

Installing on Solaris

Before you begin installing Compass Server, Version 3.01C, Service Pack 1, complete the following steps:

1. Install iPlanet Portal Server.

TIP You can install Compass Server on an existing Portal Server machine or on a separate machine.

For a high traffic portal, or a portal where Compass Server is heavily used, dedicating a machine for Compass Server is advised.

This software is available at this Web site:

<http://www.iplanet.com/downloads/download/>

NOTE You must have a license for iPlanet Portal Server.

The installation instructions are in the *iPlanet Portal Server 3.0 Release Notes* document for the service pack level you are installing. This is available at this Web site:

<http://docs.ipplanet.com/>

2. Execute the following command to stop Portal Server:

```
/etc/init.d/ipsserver stop
```

3. Execute the following command to stop the gateway, if it is installed:

```
/etc/init.d/ipsgateway stop
```

You can obtain the Compass Server software for Solaris from the CD-ROM. To install Compass Server using the Compass Server CD-ROM, complete the following steps:

1. Insert the CD-ROM and use the `cd` command to change to the directory where the SUNWipcs package is.
2. Change to root using the `su root` command.
3. Execute the following command:

```
pkgadd -d . SUNWipcs
```
4. At the Do you agree to the license terms? prompt, type `yes`.
5. Accept the default installation path for the package base directory, or specify another one.
6. Select `yes` to confirm the installation path.
7. Select `yes` to install Compass Server.

TIP Compass Server installation is done when this message appears:

```
Installation of <SUNWipcs> was successful.
```

8. Execute the following command to start Portal Server:

```
/etc/init.d/ipsserver start
```

9. Execute the following command to start the gateway, if it is installed:

```
/etc/init.d/ipsgateway start
```

Installing on Windows

You can obtain the Compass Server software for Windows from the CD-ROM. To install Compass Server using the CD-ROM, complete the following steps:

1. Verify that iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9 is installed.
2. Verify that the Web Server is on.
3. Insert the CD-ROM and change to the `winnt` directory.
4. Run the `setup.exe` file, and at the `This will install Compass Server 3.01c SP1. Do you wish to continue?` prompt, select `yes`.
5. Read the `license agreement` and select `Continue`.
6. Accept the default destination directory for your installation, or specify another one.

To install the Compass Server on a Pentium 4 machine, complete the following steps:

1. Install Java™ Development Kit 1.2.2_10 and note the path where the `jdk1.2.2` directory is installed.
2. Go to `install_path\netscape\server4\bin\https\`.
3. Replace the `jre` directory with the `jre` directory under `jdk1.2.2`.

Post-installation Steps

Once the installation is completed, you must:

- Create a new Web Server instance for your Compass Server plug-in
- Install the Compass Provider, if you wish to display a Compass channel on your portal site (for Solaris installations)

Creating a New Compass Server Instance

To create a new Compass Server instance on your portal, complete the following steps:

1. Log on to the iPlanet Web Server administration console.

TIP The default location is `http://server_name:8088`

2. Select `Add Server`.

3. Provide the information, including a user name and a unique port number and server identifier (for example: `compass`).

NOTE The `username` value must be uniform for all instances of Compass Server.

4. Follow the link to Configure more options in your server.
5. Select the Preferences/Compass Admin tab.
6. Select the Compass Server Setup button.
7. Follow the steps in the wizard to complete the basic configuration.

TIP Once you enable the Compass Server plug-in, you can access Compass Administration via the Preferences/Compass Admin tab in the Web Server Manager.

Installing the Compass Provider

If you install Compass Server on Solaris, the Compass Provider displays a Compass channel on the Portal Server desktop. Portal Server controls administration of this channel.

To install the Compass Provider, complete the following steps:

1. From the `compass_directory/plugins/compass/samples/portal` directory where you installed Compass Server, run the installation script.
2. When you are prompted, provide the following information:
 - The Portal Server installation path.

TIP The default installation path is `/opt`.

- The Compass Server instance. Enter the full server, domain and port for your Compass Server. For example: `http://compass.iplanet.com:1234`
 - The name of the domain you want to add the Compass Provider to.
3. If you have multiple Portal Server instances, copy the Compass Provider installation files to each Portal Server machine and repeat Step 1 and Step 2 for each Portal Server.

NOTE The Compass Search channel is installed as a default provider. It is automatically available to end users unless they remove it by modifying the profile.

If a user modifies the profile, the user can later add the Compass Search channel to the Portal Server desktop by selecting the Content link and selecting the Compass Search check box.

Uninstalling from Solaris

Compass Server requires a manual uninstall procedure for Solaris. This section explains how to remove an installation of Compass Server from iPlanet Portal Server or iPlanet Web Server.

To uninstall Compass Server from Solaris, complete the following steps:

1. Turn off all instances of Compass Server via the Compass administration console.
2. Remove all Compass Server instances.

From the Web Server Administration, choose Remove Server for the Web Server instances that you have upgraded to Compass.

3. Use `pkgrm SUNwipcs` to uninstall the Compass Server package.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Uninstalling from Windows

Compass Server requires a manual uninstallation procedure for Windows. This section explains how to remove an installation of Compass Server.

You can remove most Compass Server files on Windows NT manually. To do so:

1. Stop all instances of Compass Server.
2. Stop Web Server.
3. Delete all files under the `drive:\compass_directory\plugins\compass` directory.

4. Delete all Create Compass instances.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Documentation Notes

This section provides additional documentation for Compass Server. It contains the following topics:

- Performance Tuning
- Characters in Taxonomy

Performance Tuning

After you install the iPlanet Compass Server software, you can configure your software to achieve optimum performance. Factors affecting performance include traffic volume, the number of open files, heap sizes, garbage collection, available threads, and cache size affect. You can reset various parameters to improve Compass Server performance.

This section includes information about using the following parameters:

- Solaris Parameters
- Web Server Parameters
- Restricting Search Look-Up Time

Solaris Parameters

You can change TCP network connection parameters and buffer parameters to accommodate high traffic volumes.

To adjust Solaris parameters, complete the following steps:

1. To accommodate high traffic volumes, reset TCP network connection parameters and buffer parameters when the machine is rebooted. Place the parameters in a startup script in the `/etc/rc2.d` directory with executable permission. An example of a name for a startup script is `S99nddtuning`.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>ndd -set /dev/tcp tcp_time_wait_interval 240000 30000</code>	Reduces time between completion of events to 30000 from 240000.
<code>ndd -set /dev/tcp tcp_conn_req_max_q 128 1024</code>	Increases maximum number of connections with completed three-way handshake to 1024 from 128.
<code>ndd -set /dev/tcp tcp_conn_req_max_q0 1024 4096</code>	Increases maximum number of connections with handshake incomplete to 4096 from 1024.
<code>ndd -set /dev/tcp tcp_slow_start_initial 1 2</code>	Increases transmission speed of small amounts of data to 2 from 1.
<code>ndd -set /dev/tcp tcp_xmit_hiwat 8129 32768</code>	Increases the size of the transmit buffer to 32768 from 8129.
<code>ndd -set /dev/tcp tcp_recv_hiwat 8129 32768</code>	Increases the size of the receive buffer to 32768 from 8129.

2. To accommodate large numbers of open files, sockets and pipes during database indexing and searching, reset file descriptor and stream driver queue parameters in the `/etc/system` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>rlim_fd_max 8192</code>	Sets the maximum limit for processing open file descriptors to 8192.
<code>rlim_fd_cur 8192</code>	Sets maximum limit on open file descriptors for a single process to 8192.
<code>sq_max_size 0</code>	Controls the size of the streams driver queue. Set this to 0 so that performance runs are not affected by lack of buffer space. Set this on clients also.

For more information about Solaris parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

Web Server Parameters

You can change Web Server Java virtual machine parameters to control heap sizes, memory use, and number of available threads for incoming requests.

To adjust Web Server parameters, complete the following steps:

1. To index more than 100,000 documents with sizes ranging from 10 KB to 100 KB, increase initial and maximum heap sizes for the Web Server's Java Runtime Environment in the `config/jvm12.conf` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>jvm.minHeapSize=64000000</code>	Sets initial heap size for the Web Server JRE to 64 MB.
<code>jvm.maxHeapSize=512000000</code>	Sets maximum heap size for the Web Server JRE to 512 MB.

2. To reclaim memory allocated to pooled storage, modify the `JAVA_ARGS` garbage collection parameter.

The syntax for this option is:

```
-Xgenconfig:initial_size,max_size,algorithm:initial_size,max_size,algorithm
```

For example:

```
jvm.option=-Xgenconfig:64m,64m,semispaces:64m,512m,markcompact
```

This variable's default value is `#jvm.option=-Xrunoii`. The value you select depends on the application's requirements and the amount of memory in the server. To identify how much memory is used for garbage collection, add `-verbose:gc` to `JAVA_ARGS`.

NOTE The garbage collection option does not work on Windows NT 4.0 SP6.

3. To increase the number of available threads for processing incoming requests for Web Server, change the `MaxThreads` parameter in the `config/magnus.conf` file. For example:

```
MaxThreads 128
```

For more information about Web Server parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

For more information about garbage collection tuning, see the *Tuning Garbage Collection* document at:

<http://java.sun.com/docs/hotspot/>

Restricting Search Look-Up Time

Administrators can use the `search-lookup-limit` parameter in the `config/csid.conf` file to restrict look-up time so that users do not over-tax a Compass Server machine by executing queries that are not defined correctly. (Using `?`, `?*` or `??*` in a search string are examples of incorrect queries.) For example:

```
search-lookup-limit=-1
```

The default value, which is `-1`, allows unrestricted lookup time. The time unit is in milliseconds.

Characters in Taxonomy

Characters allowed in Compass Server's taxonomy, in addition to the alphanumeric character set, include the following:

- !
- &
- ,
- -
- .
- /
- ?
- _

In addition, a blank space () is allowed for separating two words (for example: `portal site`).

Known Problems and Limitations

This section lists known problems with this release of iPlanet Compass Server.

iPlanet Compass Server does not support double-byte character sets, such as Japanese, Korean and Chinese.

Workaround:

None.

How to Report Problems

If you have problems with iPlanet Compass Server, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at
http://www.iplanet.com/support/support_services_10_0.html

From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact customer support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Where to Find More Information

Useful iPlanet information can be found at the following Internet locations:

- **iPlanet release notes and other documentation** — <http://docs.iplanet.com/docs/manuals/>
- **iPlanet product status** — http://www.iplanet.com/support/technical_resources/
- **iPlanet Professional Services information** —
http://www.iplanet.com/services/professional_services_3_3.html
- **iPlanet developer information** — <http://developer.iplanet.com/>
- **iPlanet learning solutions** — <http://www.iplanet.com/learning/index.html>
- **iPlanet product data sheets** —
http://www.iplanet.com/products/product_map/product_name_2_0a.html

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Release Notes for iPlanet Compass Server

Version 3.01C, Service Pack 1

Updated March 1, 2002

The *Release Notes for iPlanet™ Compass Server, Version 3.01C, Service Pack 1* document important information available at the time of release.

NOTE If you have previously installed iPlanet Portal™ Server: Personalized Knowledge Services 3.01C, refer to the *Release Notes for iPlanet Portal Server: Personalized Knowledge Services 3.01C, Service Pack 1*.

The information in this document includes:

- What's New in Compass Server
- Software and Hardware Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
- Where to Find More Information

Read this document before you begin installing Service Pack 1. For an online version of this and other Compass Server, Version 3.01C documentation, see the iPlanet documentation Web site at:

<http://docs.iplanet.com/docs/manuals/>

After you install and start using Compass Server, Version 3.01C, Service Pack 1, check this Web site periodically to view the most up-to-date documentation.

What's New in Compass Server

iPlanet Compass Server provides automated crawling and indexing of file systems and Web sites. Users can search popular formats and can search by information categories, not just keywords.

iPlanet Compass Server, Service Pack 1 includes the following changes:

- In the `logs` directory, the `searchengine.log` file, which displays the search engine's progress in indexing, replaces the `nsirmgr.log` file.
- These additional file formats can be indexed for search:
 - StarOffice™ Writer
 - StarOffice Impress
 - StarOffice Calc
 - FrameMaker
- Single quotation marks used in the Search field now are string delineators. Previously, single quotation marks functioned as a `STEM` operator.
- Installation of the `xpdf` file format utility is no longer required.
- Some internal components are updated. Search functions have not changed, and administrators and users are not affected.

Software and Hardware Requirements

The Compass Server software has several recommended system requirements that you should meet before you start your installation. These are in addition to requirements for other products that you use in conjunction with Compass Server.

This section explains what these recommendations are.

Operating Environments

Compass Server is available for the following platforms:

- Solaris™ Operating Environment (SPARC™ Platform Edition) 2.6 (32-bit mode)
- Solaris Operating Environment (SPARC Platform Edition) 8 (32-bit and 64-bit modes)
- Windows NT 4.0 with SP6 for standalone installations

Memory

The minimum memory recommended for all platforms is the following:

- 512 MB RAM for Portal Server installations
- 256 MB RAM for standalone installations

Requirements vary according to the size of your database.

Disk Space

The minimum disk space recommended for all platforms is 500 MB. Requirements vary according to the size of your database.

Software

Compass Server requires the following:

- iPlanet Portal Server 3.0, Service Pack 3, or iPlanet Portal Server 3.0, Service Pack 3a, or iPlanet Portal Server 3.0, Service Pack 4

NOTE If you previously installed Compass Server with iPlanet™ Web Server rather than Portal Server, you can install this version of Compass Server with iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9.

- An LDAP server, to implement authentication

Web Browsers

Compass Server is compatible with the following browsers:

- Netscape™ Communicator 4.06 to 4.79 (except 4.6) for administration and for end users
- Microsoft Internet Explorer 4.0 or higher for end users

Browsers must support Javascript™, JVM™ 1.1, and cookies.

Installation Notes

This section tells you how to install iPlanet Compass Server, Service Pack 1. It contains the following topics:

- Installing on Solaris
- Installing on Windows
- Post-installation Steps
- Uninstalling from Solaris
- Uninstalling from Windows

NOTE If your Portal Server deployment has multiple platform servers and gateways, identify where you plan to install Compass Server before you begin.

Installing on Solaris

Before you begin installing Compass Server, Version 3.01C, Service Pack 1, complete the following steps:

1. Install iPlanet Portal Server.

TIP You can install Compass Server on an existing Portal Server machine or on a separate machine.

For a high traffic portal, or a portal where Compass Server is heavily used, dedicating a machine for Compass Server is advised.

This software is available at this Web site:

<http://www.iplanet.com/downloads/download/>

NOTE You must have a license for iPlanet Portal Server.

The installation instructions are in the *iPlanet Portal Server 3.0 Release Notes* document for the service pack level you are installing. This is available at this Web site:

<http://docs.ipplanet.com/>

2. Execute the following command to stop Portal Server:

```
/etc/init.d/ipsserver stop
```

3. Execute the following command to stop the gateway, if it is installed:

```
/etc/init.d/ipsgateway stop
```

You can obtain the Compass Server software for Solaris from the CD-ROM. To install Compass Server using the Compass Server CD-ROM, complete the following steps:

1. Insert the CD-ROM and use the `cd` command to change to the directory where the SUNWipcs package is.
2. Change to root using the `su root` command.
3. Execute the following command:

```
pkgadd -d . SUNWipcs
```
4. At the Do you agree to the license terms? prompt, type `yes`.
5. Accept the default installation path for the package base directory, or specify another one.
6. Select `yes` to confirm the installation path.
7. Select `yes` to install Compass Server.

TIP Compass Server installation is done when this message appears:

```
Installation of <SUNWipcs> was successful.
```

8. Execute the following command to start Portal Server:

```
/etc/init.d/ipsserver start
```

9. Execute the following command to start the gateway, if it is installed:

```
/etc/init.d/ipsgateway start
```

Installing on Windows

You can obtain the Compass Server software for Windows from the CD-ROM. To install Compass Server using the CD-ROM, complete the following steps:

1. Verify that iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9 is installed.
2. Verify that the Web Server is on.
3. Insert the CD-ROM and change to the `winnt` directory.
4. Run the `setup.exe` file, and at the `This will install Compass Server 3.01c SP1. Do you wish to continue?` prompt, select `yes`.
5. Read the `license agreement` and select `Continue`.
6. Accept the default destination directory for your installation, or specify another one.

To install the Compass Server on a Pentium 4 machine, complete the following steps:

1. Install Java™ Development Kit 1.2.2_10 and note the path where the `jdk1.2.2` directory is installed.
2. Go to `install_path\netscape\server4\bin\https\`.
3. Replace the `jre` directory with the `jre` directory under `jdk1.2.2`.

Post-installation Steps

Once the installation is completed, you must:

- Create a new Web Server instance for your Compass Server plug-in
- Install the Compass Provider, if you wish to display a Compass channel on your portal site (for Solaris installations)

Creating a New Compass Server Instance

To create a new Compass Server instance on your portal, complete the following steps:

1. Log on to the iPlanet Web Server administration console.

TIP The default location is `http://server_name:8088`

2. Select `Add Server`.

3. Provide the information, including a user name and a unique port number and server identifier (for example: `compass`).

NOTE The `username` value must be uniform for all instances of Compass Server.

4. Follow the link to Configure more options in your server.
5. Select the Preferences/Compass Admin tab.
6. Select the Compass Server Setup button.
7. Follow the steps in the wizard to complete the basic configuration.

TIP Once you enable the Compass Server plug-in, you can access Compass Administration via the Preferences/Compass Admin tab in the Web Server Manager.

Installing the Compass Provider

If you install Compass Server on Solaris, the Compass Provider displays a Compass channel on the Portal Server desktop. Portal Server controls administration of this channel.

To install the Compass Provider, complete the following steps:

1. From the `compass_directory/plugins/compass/samples/portal` directory where you installed Compass Server, run the installation script.
2. When you are prompted, provide the following information:
 - The Portal Server installation path.

TIP The default installation path is `/opt`.

- The Compass Server instance. Enter the full server, domain and port for your Compass Server. For example: `http://compass.iplanet.com:1234`
 - The name of the domain you want to add the Compass Provider to.
3. If you have multiple Portal Server instances, copy the Compass Provider installation files to each Portal Server machine and repeat Step 1 and Step 2 for each Portal Server.

NOTE The Compass Search channel is installed as a default provider. It is automatically available to end users unless they remove it by modifying the profile.

If a user modifies the profile, the user can later add the Compass Search channel to the Portal Server desktop by selecting the Content link and selecting the Compass Search check box.

Uninstalling from Solaris

Compass Server requires a manual uninstall procedure for Solaris. This section explains how to remove an installation of Compass Server from iPlanet Portal Server or iPlanet Web Server.

To uninstall Compass Server from Solaris, complete the following steps:

1. Turn off all instances of Compass Server via the Compass administration console.
2. Remove all Compass Server instances.

From the Web Server Administration, choose Remove Server for the Web Server instances that you have upgraded to Compass.

3. Use `pkgrm SUNwipcs` to uninstall the Compass Server package.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Uninstalling from Windows

Compass Server requires a manual uninstallation procedure for Windows. This section explains how to remove an installation of Compass Server.

You can remove most Compass Server files on Windows NT manually. To do so:

1. Stop all instances of Compass Server.
2. Stop Web Server.
3. Delete all files under the `drive:\compass_directory\plugins\compass` directory.

4. Delete all Create Compass instances.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Documentation Notes

This section provides additional documentation for Compass Server. It contains the following topics:

- Performance Tuning
- Characters in Taxonomy

Performance Tuning

After you install the iPlanet Compass Server software, you can configure your software to achieve optimum performance. Factors affecting performance include traffic volume, the number of open files, heap sizes, garbage collection, available threads, and cache size affect. You can reset various parameters to improve Compass Server performance.

This section includes information about using the following parameters:

- Solaris Parameters
- Web Server Parameters
- Restricting Search Look-Up Time

Solaris Parameters

You can change TCP network connection parameters and buffer parameters to accommodate high traffic volumes.

To adjust Solaris parameters, complete the following steps:

1. To accommodate high traffic volumes, reset TCP network connection parameters and buffer parameters when the machine is rebooted. Place the parameters in a startup script in the `/etc/rc2.d` directory with executable permission. An example of a name for a startup script is `S99nddtuning`.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>ndd -set /dev/tcp tcp_time_wait_interval 240000 30000</code>	Reduces time between completion of events to 30000 from 240000.
<code>ndd -set /dev/tcp tcp_conn_req_max_q 128 1024</code>	Increases maximum number of connections with completed three-way handshake to 1024 from 128.
<code>ndd -set /dev/tcp tcp_conn_req_max_q0 1024 4096</code>	Increases maximum number of connections with handshake incomplete to 4096 from 1024.
<code>ndd -set /dev/tcp tcp_slow_start_initial 1 2</code>	Increases transmission speed of small amounts of data to 2 from 1.
<code>ndd -set /dev/tcp tcp_xmit_hiwat 8129 32768</code>	Increases the size of the transmit buffer to 32768 from 8129.
<code>ndd -set /dev/tcp tcp_recv_hiwat 8129 32768</code>	Increases the size of the receive buffer to 32768 from 8129.

2. To accommodate large numbers of open files, sockets and pipes during database indexing and searching, reset file descriptor and stream driver queue parameters in the `/etc/system` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>rlim_fd_max 8192</code>	Sets the maximum limit for processing open file descriptors to 8192.
<code>rlim_fd_cur 8192</code>	Sets maximum limit on open file descriptors for a single process to 8192.
<code>sq_max_size 0</code>	Controls the size of the streams driver queue. Set this to 0 so that performance runs are not affected by lack of buffer space. Set this on clients also.

For more information about Solaris parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

Web Server Parameters

You can change Web Server Java virtual machine parameters to control heap sizes, memory use, and number of available threads for incoming requests.

To adjust Web Server parameters, complete the following steps:

1. To index more than 100,000 documents with sizes ranging from 10 KB to 100 KB, increase initial and maximum heap sizes for the Web Server's Java Runtime Environment in the `config/jvm12.conf` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>jvm.minHeapSize=64000000</code>	Sets initial heap size for the Web Server JRE to 64 MB.
<code>jvm.maxHeapSize=512000000</code>	Sets maximum heap size for the Web Server JRE to 512 MB.

2. To reclaim memory allocated to pooled storage, modify the `JAVA_ARGS` garbage collection parameter.

The syntax for this option is:

```
-Xgenconfig:initial_size,max_size,algorithm:initial_size,max_size,algorithm
```

For example:

```
jvm.option=-Xgenconfig:64m,64m,semispaces:64m,512m,markcompact
```

This variable's default value is `#jvm.option=-Xrunoii`. The value you select depends on the application's requirements and the amount of memory in the server. To identify how much memory is used for garbage collection, add `-verbose:gc` to `JAVA_ARGS`.

NOTE The garbage collection option does not work on Windows NT 4.0 SP6.

3. To increase the number of available threads for processing incoming requests for Web Server, change the `MaxThreads` parameter in the `config/magnus.conf` file. For example:

```
MaxThreads 128
```

For more information about Web Server parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

For more information about garbage collection tuning, see the *Tuning Garbage Collection* document at:

<http://java.sun.com/docs/hotspot/>

Restricting Search Look-Up Time

Administrators can use the `search-lookup-limit` parameter in the `config/csid.conf` file to restrict look-up time so that users do not over-tax a Compass Server machine by executing queries that are not defined correctly. (Using `?`, `?*` or `??*` in a search string are examples of incorrect queries.) For example:

```
search-lookup-limit=-1
```

The default value, which is `-1`, allows unrestricted lookup time. The time unit is in milliseconds.

Characters in Taxonomy

Characters allowed in Compass Server's taxonomy, in addition to the alphanumeric character set, include the following:

- !
- &
- ,
- -
- .
- /
- ?
- _

In addition, a blank space () is allowed for separating two words (for example: `portal site`).

Known Problems and Limitations

This section lists known problems with this release of iPlanet Compass Server.

iPlanet Compass Server does not support double-byte character sets, such as Japanese, Korean and Chinese.

Workaround:

None.

How to Report Problems

If you have problems with iPlanet Compass Server, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at
http://www.iplanet.com/support/support_services_10_0.html

From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact customer support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Where to Find More Information

Useful iPlanet information can be found at the following Internet locations:

- **iPlanet release notes and other documentation** — <http://docs.iplanet.com/docs/manuals/>
- **iPlanet product status** — http://www.iplanet.com/support/technical_resources/
- **iPlanet Professional Services information** —
http://www.iplanet.com/services/professional_services_3_3.html
- **iPlanet developer information** — <http://developer.iplanet.com/>
- **iPlanet learning solutions** — <http://www.iplanet.com/learning/index.html>
- **iPlanet product data sheets** —
http://www.iplanet.com/products/product_map/product_name_2_0a.html

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Release Notes for iPlanet Compass Server

Version 3.01C, Service Pack 1

Updated March 1, 2002

The *Release Notes for iPlanet™ Compass Server, Version 3.01C, Service Pack 1* document important information available at the time of release.

NOTE If you have previously installed iPlanet Portal™ Server: Personalized Knowledge Services 3.01C, refer to the *Release Notes for iPlanet Portal Server: Personalized Knowledge Services 3.01C, Service Pack 1*.

The information in this document includes:

- What's New in Compass Server
- Software and Hardware Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
- Where to Find More Information

Read this document before you begin installing Service Pack 1. For an online version of this and other Compass Server, Version 3.01C documentation, see the iPlanet documentation Web site at:

<http://docs.iplanet.com/docs/manuals/>

After you install and start using Compass Server, Version 3.01C, Service Pack 1, check this Web site periodically to view the most up-to-date documentation.

What's New in Compass Server

iPlanet Compass Server provides automated crawling and indexing of file systems and Web sites. Users can search popular formats and can search by information categories, not just keywords.

iPlanet Compass Server, Service Pack 1 includes the following changes:

- In the `logs` directory, the `searchengine.log` file, which displays the search engine's progress in indexing, replaces the `nsirmgr.log` file.
- These additional file formats can be indexed for search:
 - StarOffice™ Writer
 - StarOffice Impress
 - StarOffice Calc
 - FrameMaker
- Single quotation marks used in the Search field now are string delineators. Previously, single quotation marks functioned as a `STEM` operator.
- Installation of the `xpdf` file format utility is no longer required.
- Some internal components are updated. Search functions have not changed, and administrators and users are not affected.

Software and Hardware Requirements

The Compass Server software has several recommended system requirements that you should meet before you start your installation. These are in addition to requirements for other products that you use in conjunction with Compass Server.

This section explains what these recommendations are.

Operating Environments

Compass Server is available for the following platforms:

- Solaris™ Operating Environment (SPARC™ Platform Edition) 2.6 (32-bit mode)
- Solaris Operating Environment (SPARC Platform Edition) 8 (32-bit and 64-bit modes)
- Windows NT 4.0 with SP6 for standalone installations

Memory

The minimum memory recommended for all platforms is the following:

- 512 MB RAM for Portal Server installations
- 256 MB RAM for standalone installations

Requirements vary according to the size of your database.

Disk Space

The minimum disk space recommended for all platforms is 500 MB. Requirements vary according to the size of your database.

Software

Compass Server requires the following:

- iPlanet Portal Server 3.0, Service Pack 3, or iPlanet Portal Server 3.0, Service Pack 3a, or iPlanet Portal Server 3.0, Service Pack 4

NOTE If you previously installed Compass Server with iPlanet™ Web Server rather than Portal Server, you can install this version of Compass Server with iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9.

- An LDAP server, to implement authentication

Web Browsers

Compass Server is compatible with the following browsers:

- Netscape™ Communicator 4.06 to 4.79 (except 4.6) for administration and for end users
- Microsoft Internet Explorer 4.0 or higher for end users

Browsers must support Javascript™, JVM™ 1.1, and cookies.

Installation Notes

This section tells you how to install iPlanet Compass Server, Service Pack 1. It contains the following topics:

- Installing on Solaris
- Installing on Windows
- Post-installation Steps
- Uninstalling from Solaris
- Uninstalling from Windows

NOTE If your Portal Server deployment has multiple platform servers and gateways, identify where you plan to install Compass Server before you begin.

Installing on Solaris

Before you begin installing Compass Server, Version 3.01C, Service Pack 1, complete the following steps:

1. Install iPlanet Portal Server.

TIP You can install Compass Server on an existing Portal Server machine or on a separate machine.

For a high traffic portal, or a portal where Compass Server is heavily used, dedicating a machine for Compass Server is advised.

This software is available at this Web site:

<http://www.iplanet.com/downloads/download/>

NOTE You must have a license for iPlanet Portal Server.

The installation instructions are in the *iPlanet Portal Server 3.0 Release Notes* document for the service pack level you are installing. This is available at this Web site:

<http://docs.ipplanet.com/>

2. Execute the following command to stop Portal Server:

```
/etc/init.d/ipsserver stop
```

3. Execute the following command to stop the gateway, if it is installed:

```
/etc/init.d/ipsgateway stop
```

You can obtain the Compass Server software for Solaris from the CD-ROM. To install Compass Server using the Compass Server CD-ROM, complete the following steps:

1. Insert the CD-ROM and use the `cd` command to change to the directory where the SUNWipcs package is.
2. Change to root using the `su root` command.
3. Execute the following command:

```
pkgadd -d . SUNWipcs
```
4. At the Do you agree to the license terms? prompt, type `yes`.
5. Accept the default installation path for the package base directory, or specify another one.
6. Select `yes` to confirm the installation path.
7. Select `yes` to install Compass Server.

TIP Compass Server installation is done when this message appears:

```
Installation of <SUNWipcs> was successful.
```

8. Execute the following command to start Portal Server:

```
/etc/init.d/ipsserver start
```

9. Execute the following command to start the gateway, if it is installed:

```
/etc/init.d/ipsgateway start
```

Installing on Windows

You can obtain the Compass Server software for Windows from the CD-ROM. To install Compass Server using the CD-ROM, complete the following steps:

1. Verify that iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9 is installed.
2. Verify that the Web Server is on.
3. Insert the CD-ROM and change to the `winnt` directory.
4. Run the `setup.exe` file, and at the `This will install Compass Server 3.01c SP1. Do you wish to continue?` prompt, select `yes`.
5. Read the `license agreement` and select `Continue`.
6. Accept the default destination directory for your installation, or specify another one.

To install the Compass Server on a Pentium 4 machine, complete the following steps:

1. Install Java™ Development Kit 1.2.2_10 and note the path where the `jdk1.2.2` directory is installed.
2. Go to `install_path\netscape\server4\bin\https\`.
3. Replace the `jre` directory with the `jre` directory under `jdk1.2.2`.

Post-installation Steps

Once the installation is completed, you must:

- Create a new Web Server instance for your Compass Server plug-in
- Install the Compass Provider, if you wish to display a Compass channel on your portal site (for Solaris installations)

Creating a New Compass Server Instance

To create a new Compass Server instance on your portal, complete the following steps:

1. Log on to the iPlanet Web Server administration console.

TIP The default location is `http://server_name:8088`

2. Select `Add Server`.

3. Provide the information, including a user name and a unique port number and server identifier (for example: `compass`).

NOTE The `username` value must be uniform for all instances of Compass Server.

4. Follow the link to Configure more options in your server.
5. Select the Preferences/Compass Admin tab.
6. Select the Compass Server Setup button.
7. Follow the steps in the wizard to complete the basic configuration.

TIP Once you enable the Compass Server plug-in, you can access Compass Administration via the Preferences/Compass Admin tab in the Web Server Manager.

Installing the Compass Provider

If you install Compass Server on Solaris, the Compass Provider displays a Compass channel on the Portal Server desktop. Portal Server controls administration of this channel.

To install the Compass Provider, complete the following steps:

1. From the `compass_directory/plugins/compass/samples/portal` directory where you installed Compass Server, run the installation script.
2. When you are prompted, provide the following information:
 - The Portal Server installation path.

TIP The default installation path is `/opt`.

- The Compass Server instance. Enter the full server, domain and port for your Compass Server. For example: `http://compass.iplanet.com:1234`
 - The name of the domain you want to add the Compass Provider to.
3. If you have multiple Portal Server instances, copy the Compass Provider installation files to each Portal Server machine and repeat Step 1 and Step 2 for each Portal Server.

NOTE The Compass Search channel is installed as a default provider. It is automatically available to end users unless they remove it by modifying the profile.

If a user modifies the profile, the user can later add the Compass Search channel to the Portal Server desktop by selecting the Content link and selecting the Compass Search check box.

Uninstalling from Solaris

Compass Server requires a manual uninstall procedure for Solaris. This section explains how to remove an installation of Compass Server from iPlanet Portal Server or iPlanet Web Server.

To uninstall Compass Server from Solaris, complete the following steps:

1. Turn off all instances of Compass Server via the Compass administration console.
2. Remove all Compass Server instances.

From the Web Server Administration, choose Remove Server for the Web Server instances that you have upgraded to Compass.

3. Use `pkgrm SUNwipcs` to uninstall the Compass Server package.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Uninstalling from Windows

Compass Server requires a manual uninstallation procedure for Windows. This section explains how to remove an installation of Compass Server.

You can remove most Compass Server files on Windows NT manually. To do so:

1. Stop all instances of Compass Server.
2. Stop Web Server.
3. Delete all files under the `drive:\compass_directory\plugins\compass` directory.

4. Delete all Create Compass instances.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Documentation Notes

This section provides additional documentation for Compass Server. It contains the following topics:

- Performance Tuning
- Characters in Taxonomy

Performance Tuning

After you install the iPlanet Compass Server software, you can configure your software to achieve optimum performance. Factors affecting performance include traffic volume, the number of open files, heap sizes, garbage collection, available threads, and cache size affect. You can reset various parameters to improve Compass Server performance.

This section includes information about using the following parameters:

- Solaris Parameters
- Web Server Parameters
- Restricting Search Look-Up Time

Solaris Parameters

You can change TCP network connection parameters and buffer parameters to accommodate high traffic volumes.

To adjust Solaris parameters, complete the following steps:

1. To accommodate high traffic volumes, reset TCP network connection parameters and buffer parameters when the machine is rebooted. Place the parameters in a startup script in the `/etc/rc2.d` directory with executable permission. An example of a name for a startup script is `S99nddtuning`.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>ndd -set /dev/tcp tcp_time_wait_interval 240000 30000</code>	Reduces time between completion of events to 30000 from 240000.
<code>ndd -set /dev/tcp tcp_conn_req_max_q 128 1024</code>	Increases maximum number of connections with completed three-way handshake to 1024 from 128.
<code>ndd -set /dev/tcp tcp_conn_req_max_q0 1024 4096</code>	Increases maximum number of connections with handshake incomplete to 4096 from 1024.
<code>ndd -set /dev/tcp tcp_slow_start_initial 1 2</code>	Increases transmission speed of small amounts of data to 2 from 1.
<code>ndd -set /dev/tcp tcp_xmit_hiwat 8129 32768</code>	Increases the size of the transmit buffer to 32768 from 8129.
<code>ndd -set /dev/tcp tcp_recv_hiwat 8129 32768</code>	Increases the size of the receive buffer to 32768 from 8129.

2. To accommodate large numbers of open files, sockets and pipes during database indexing and searching, reset file descriptor and stream driver queue parameters in the `/etc/system` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>rlim_fd_max 8192</code>	Sets the maximum limit for processing open file descriptors to 8192.
<code>rlim_fd_cur 8192</code>	Sets maximum limit on open file descriptors for a single process to 8192.
<code>sq_max_size 0</code>	Controls the size of the streams driver queue. Set this to 0 so that performance runs are not affected by lack of buffer space. Set this on clients also.

For more information about Solaris parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

Web Server Parameters

You can change Web Server Java virtual machine parameters to control heap sizes, memory use, and number of available threads for incoming requests.

To adjust Web Server parameters, complete the following steps:

1. To index more than 100,000 documents with sizes ranging from 10 KB to 100 KB, increase initial and maximum heap sizes for the Web Server's Java Runtime Environment in the `config/jvm12.conf` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>jvm.minHeapSize=64000000</code>	Sets initial heap size for the Web Server JRE to 64 MB.
<code>jvm.maxHeapSize=512000000</code>	Sets maximum heap size for the Web Server JRE to 512 MB.

2. To reclaim memory allocated to pooled storage, modify the `JAVA_ARGS` garbage collection parameter.

The syntax for this option is:

```
-Xgenconfig:initial_size,max_size,algorithm:initial_size,max_size,algorithm
```

For example:

```
jvm.option=-Xgenconfig:64m,64m,semispaces:64m,512m,markcompact
```

This variable's default value is `#jvm.option=-Xrunoii`. The value you select depends on the application's requirements and the amount of memory in the server. To identify how much memory is used for garbage collection, add `-verbose:gc` to `JAVA_ARGS`.

NOTE The garbage collection option does not work on Windows NT 4.0 SP6.

3. To increase the number of available threads for processing incoming requests for Web Server, change the `MaxThreads` parameter in the `config/magnus.conf` file. For example:

```
MaxThreads 128
```

For more information about Web Server parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

For more information about garbage collection tuning, see the *Tuning Garbage Collection* document at:

<http://java.sun.com/docs/hotspot/>

Restricting Search Look-Up Time

Administrators can use the `search-lookup-limit` parameter in the `config/csid.conf` file to restrict look-up time so that users do not over-tax a Compass Server machine by executing queries that are not defined correctly. (Using `?`, `?*` or `??*` in a search string are examples of incorrect queries.) For example:

```
search-lookup-limit=-1
```

The default value, which is `-1`, allows unrestricted lookup time. The time unit is in milliseconds.

Characters in Taxonomy

Characters allowed in Compass Server's taxonomy, in addition to the alphanumeric character set, include the following:

- !
- &
- ,
- -
- .
- /
- ?
- _

In addition, a blank space () is allowed for separating two words (for example: `portal site`).

Known Problems and Limitations

This section lists known problems with this release of iPlanet Compass Server.

iPlanet Compass Server does not support double-byte character sets, such as Japanese, Korean and Chinese.

Workaround:

None.

How to Report Problems

If you have problems with iPlanet Compass Server, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at
http://www.iplanet.com/support/support_services_10_0.html

From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact customer support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Where to Find More Information

Useful iPlanet information can be found at the following Internet locations:

- **iPlanet release notes and other documentation** — <http://docs.iplanet.com/docs/manuals/>
- **iPlanet product status** — http://www.iplanet.com/support/technical_resources/
- **iPlanet Professional Services information** —
http://www.iplanet.com/services/professional_services_3_3.html
- **iPlanet developer information** — <http://developer.iplanet.com/>
- **iPlanet learning solutions** — <http://www.iplanet.com/learning/index.html>
- **iPlanet product data sheets** —
http://www.iplanet.com/products/product_map/product_name_2_0a.html

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Release Notes for iPlanet Compass Server

Version 3.01C, Service Pack 1

Updated March 1, 2002

The *Release Notes for iPlanet™ Compass Server, Version 3.01C, Service Pack 1* document important information available at the time of release.

NOTE If you have previously installed iPlanet Portal™ Server: Personalized Knowledge Services 3.01C, refer to the *Release Notes for iPlanet Portal Server: Personalized Knowledge Services 3.01C, Service Pack 1*.

The information in this document includes:

- What's New in Compass Server
- Software and Hardware Requirements
- Installation Notes
- Known Problems and Limitations
- How to Report Problems
- Where to Find More Information

Read this document before you begin installing Service Pack 1. For an online version of this and other Compass Server, Version 3.01C documentation, see the iPlanet documentation Web site at:

<http://docs.iplanet.com/docs/manuals/>

After you install and start using Compass Server, Version 3.01C, Service Pack 1, check this Web site periodically to view the most up-to-date documentation.

What's New in Compass Server

iPlanet Compass Server provides automated crawling and indexing of file systems and Web sites. Users can search popular formats and can search by information categories, not just keywords.

iPlanet Compass Server, Service Pack 1 includes the following changes:

- In the `logs` directory, the `searchengine.log` file, which displays the search engine's progress in indexing, replaces the `nsirmgr.log` file.
- These additional file formats can be indexed for search:
 - StarOffice™ Writer
 - StarOffice Impress
 - StarOffice Calc
 - FrameMaker
- Single quotation marks used in the Search field now are string delineators. Previously, single quotation marks functioned as a `STEM` operator.
- Installation of the `xpdf` file format utility is no longer required.
- Some internal components are updated. Search functions have not changed, and administrators and users are not affected.

Software and Hardware Requirements

The Compass Server software has several recommended system requirements that you should meet before you start your installation. These are in addition to requirements for other products that you use in conjunction with Compass Server.

This section explains what these recommendations are.

Operating Environments

Compass Server is available for the following platforms:

- Solaris™ Operating Environment (SPARC™ Platform Edition) 2.6 (32-bit mode)
- Solaris Operating Environment (SPARC Platform Edition) 8 (32-bit and 64-bit modes)
- Windows NT 4.0 with SP6 for standalone installations

Memory

The minimum memory recommended for all platforms is the following:

- 512 MB RAM for Portal Server installations
- 256 MB RAM for standalone installations

Requirements vary according to the size of your database.

Disk Space

The minimum disk space recommended for all platforms is 500 MB. Requirements vary according to the size of your database.

Software

Compass Server requires the following:

- iPlanet Portal Server 3.0, Service Pack 3, or iPlanet Portal Server 3.0, Service Pack 3a, or iPlanet Portal Server 3.0, Service Pack 4

NOTE If you previously installed Compass Server with iPlanet™ Web Server rather than Portal Server, you can install this version of Compass Server with iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9.

- An LDAP server, to implement authentication

Web Browsers

Compass Server is compatible with the following browsers:

- Netscape™ Communicator 4.06 to 4.79 (except 4.6) for administration and for end users
- Microsoft Internet Explorer 4.0 or higher for end users

Browsers must support Javascript™, JVM™ 1.1, and cookies.

Installation Notes

This section tells you how to install iPlanet Compass Server, Service Pack 1. It contains the following topics:

- Installing on Solaris
- Installing on Windows
- Post-installation Steps
- Uninstalling from Solaris
- Uninstalling from Windows

NOTE If your Portal Server deployment has multiple platform servers and gateways, identify where you plan to install Compass Server before you begin.

Installing on Solaris

Before you begin installing Compass Server, Version 3.01C, Service Pack 1, complete the following steps:

1. Install iPlanet Portal Server.

TIP You can install Compass Server on an existing Portal Server machine or on a separate machine.

For a high traffic portal, or a portal where Compass Server is heavily used, dedicating a machine for Compass Server is advised.

This software is available at this Web site:

<http://www.iplanet.com/downloads/download/>

NOTE You must have a license for iPlanet Portal Server.

The installation instructions are in the *iPlanet Portal Server 3.0 Release Notes* document for the service pack level you are installing. This is available at this Web site:

<http://docs.ipplanet.com/>

2. Execute the following command to stop Portal Server:

```
/etc/init.d/ipsserver stop
```

3. Execute the following command to stop the gateway, if it is installed:

```
/etc/init.d/ipsgateway stop
```

You can obtain the Compass Server software for Solaris from the CD-ROM. To install Compass Server using the Compass Server CD-ROM, complete the following steps:

1. Insert the CD-ROM and use the `cd` command to change to the directory where the SUNWipcs package is.
2. Change to root using the `su root` command.
3. Execute the following command:

```
pkgadd -d . SUNWipcs
```
4. At the Do you agree to the license terms? prompt, type `yes`.
5. Accept the default installation path for the package base directory, or specify another one.
6. Select `yes` to confirm the installation path.
7. Select `yes` to install Compass Server.

TIP Compass Server installation is done when this message appears:

```
Installation of <SUNWipcs> was successful.
```

8. Execute the following command to start Portal Server:

```
/etc/init.d/ipsserver start
```

9. Execute the following command to start the gateway, if it is installed:

```
/etc/init.d/ipsgateway start
```

Installing on Windows

You can obtain the Compass Server software for Windows from the CD-ROM. To install Compass Server using the CD-ROM, complete the following steps:

1. Verify that iPlanet Web Server, Enterprise Edition 4.1, SP7 or iPlanet Web Server, Enterprise Edition 4.1, SP9 is installed.
2. Verify that the Web Server is on.
3. Insert the CD-ROM and change to the `winnt` directory.
4. Run the `setup.exe` file, and at the `This will install Compass Server 3.01c SP1. Do you wish to continue?` prompt, select `yes`.
5. Read the `license agreement` and select `Continue`.
6. Accept the default destination directory for your installation, or specify another one.

To install the Compass Server on a Pentium 4 machine, complete the following steps:

1. Install Java™ Development Kit 1.2.2_10 and note the path where the `jdk1.2.2` directory is installed.
2. Go to `install_path\netscape\server4\bin\https\`.
3. Replace the `jre` directory with the `jre` directory under `jdk1.2.2`.

Post-installation Steps

Once the installation is completed, you must:

- Create a new Web Server instance for your Compass Server plug-in
- Install the Compass Provider, if you wish to display a Compass channel on your portal site (for Solaris installations)

Creating a New Compass Server Instance

To create a new Compass Server instance on your portal, complete the following steps:

1. Log on to the iPlanet Web Server administration console.

TIP The default location is `http://server_name:8088`

2. Select `Add Server`.

3. Provide the information, including a user name and a unique port number and server identifier (for example: `compass`).

NOTE The `username` value must be uniform for all instances of Compass Server.

4. Follow the link to Configure more options in your server.
5. Select the Preferences/Compass Admin tab.
6. Select the Compass Server Setup button.
7. Follow the steps in the wizard to complete the basic configuration.

TIP Once you enable the Compass Server plug-in, you can access Compass Administration via the Preferences/Compass Admin tab in the Web Server Manager.

Installing the Compass Provider

If you install Compass Server on Solaris, the Compass Provider displays a Compass channel on the Portal Server desktop. Portal Server controls administration of this channel.

To install the Compass Provider, complete the following steps:

1. From the `compass_directory/plugins/compass/samples/portal` directory where you installed Compass Server, run the installation script.
2. When you are prompted, provide the following information:
 - The Portal Server installation path.

TIP The default installation path is `/opt`.

- The Compass Server instance. Enter the full server, domain and port for your Compass Server. For example: `http://compass.iplanet.com:1234`
 - The name of the domain you want to add the Compass Provider to.
3. If you have multiple Portal Server instances, copy the Compass Provider installation files to each Portal Server machine and repeat Step 1 and Step 2 for each Portal Server.

NOTE The Compass Search channel is installed as a default provider. It is automatically available to end users unless they remove it by modifying the profile.

If a user modifies the profile, the user can later add the Compass Search channel to the Portal Server desktop by selecting the Content link and selecting the Compass Search check box.

Uninstalling from Solaris

Compass Server requires a manual uninstall procedure for Solaris. This section explains how to remove an installation of Compass Server from iPlanet Portal Server or iPlanet Web Server.

To uninstall Compass Server from Solaris, complete the following steps:

1. Turn off all instances of Compass Server via the Compass administration console.
2. Remove all Compass Server instances.

From the Web Server Administration, choose Remove Server for the Web Server instances that you have upgraded to Compass.

3. Use `pkgrm SUNwipcs` to uninstall the Compass Server package.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Uninstalling from Windows

Compass Server requires a manual uninstallation procedure for Windows. This section explains how to remove an installation of Compass Server.

You can remove most Compass Server files on Windows NT manually. To do so:

1. Stop all instances of Compass Server.
2. Stop Web Server.
3. Delete all files under the `drive:\compass_directory\plugins\compass` directory.

4. Delete all Create Compass instances.

NOTE Some iPlanet Web Server files are updated during Compass Server installation. For information about restoring these files to their original versions after you remove Compass Server, see the *iPlanet Compass Server 3.01C Installation and Migration Guide*, available at this Web site:

<http://docs.iplanet.com/>

Documentation Notes

This section provides additional documentation for Compass Server. It contains the following topics:

- Performance Tuning
- Characters in Taxonomy

Performance Tuning

After you install the iPlanet Compass Server software, you can configure your software to achieve optimum performance. Factors affecting performance include traffic volume, the number of open files, heap sizes, garbage collection, available threads, and cache size affect. You can reset various parameters to improve Compass Server performance.

This section includes information about using the following parameters:

- Solaris Parameters
- Web Server Parameters
- Restricting Search Look-Up Time

Solaris Parameters

You can change TCP network connection parameters and buffer parameters to accommodate high traffic volumes.

To adjust Solaris parameters, complete the following steps:

1. To accommodate high traffic volumes, reset TCP network connection parameters and buffer parameters when the machine is rebooted. Place the parameters in a startup script in the `/etc/rc2.d` directory with executable permission. An example of a name for a startup script is `S99nddtuning`.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>ndd -set /dev/tcp tcp_time_wait_interval 240000 30000</code>	Reduces time between completion of events to 30000 from 240000.
<code>ndd -set /dev/tcp tcp_conn_req_max_q 128 1024</code>	Increases maximum number of connections with completed three-way handshake to 1024 from 128.
<code>ndd -set /dev/tcp tcp_conn_req_max_q0 1024 4096</code>	Increases maximum number of connections with handshake incomplete to 4096 from 1024.
<code>ndd -set /dev/tcp tcp_slow_start_initial 1 2</code>	Increases transmission speed of small amounts of data to 2 from 1.
<code>ndd -set /dev/tcp tcp_xmit_hiwat 8129 32768</code>	Increases the size of the transmit buffer to 32768 from 8129.
<code>ndd -set /dev/tcp tcp_recv_hiwat 8129 32768</code>	Increases the size of the receive buffer to 32768 from 8129.

2. To accommodate large numbers of open files, sockets and pipes during database indexing and searching, reset file descriptor and stream driver queue parameters in the `/etc/system` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>rlim_fd_max 8192</code>	Sets the maximum limit for processing open file descriptors to 8192.
<code>rlim_fd_cur 8192</code>	Sets maximum limit on open file descriptors for a single process to 8192.
<code>sq_max_size 0</code>	Controls the size of the streams driver queue. Set this to 0 so that performance runs are not affected by lack of buffer space. Set this on clients also.

For more information about Solaris parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

Web Server Parameters

You can change Web Server Java virtual machine parameters to control heap sizes, memory use, and number of available threads for incoming requests.

To adjust Web Server parameters, complete the following steps:

1. To index more than 100,000 documents with sizes ranging from 10 KB to 100 KB, increase initial and maximum heap sizes for the Web Server's Java Runtime Environment in the `config/jvm12.conf` file.

This table provides the syntax and examples of values for these parameters:

Parameter Syntax	Description
<code>jvm.minHeapSize=64000000</code>	Sets initial heap size for the Web Server JRE to 64 MB.
<code>jvm.maxHeapSize=512000000</code>	Sets maximum heap size for the Web Server JRE to 512 MB.

2. To reclaim memory allocated to pooled storage, modify the `JAVA_ARGS` garbage collection parameter.

The syntax for this option is:

```
-Xgenconfig:initial_size,max_size,algorithm:initial_size,max_size,algorithm
```

For example:

```
jvm.option=-Xgenconfig:64m,64m,semispaces:64m,512m,markcompact
```

This variable's default value is `#jvm.option=-Xrunoii`. The value you select depends on the application's requirements and the amount of memory in the server. To identify how much memory is used for garbage collection, add `-verbose:gc` to `JAVA_ARGS`.

NOTE The garbage collection option does not work on Windows NT 4.0 SP6.

3. To increase the number of available threads for processing incoming requests for Web Server, change the `MaxThreads` parameter in the `config/magnus.conf` file. For example:

```
MaxThreads 128
```

For more information about Web Server parameters, see the *iPlanet Web Server, Enterprise Edition 4.1 Performance Tuning, Sizing, and Scaling Guide* at:

<http://docs.iplanet.com/docs/manuals/>

For more information about garbage collection tuning, see the *Tuning Garbage Collection* document at:

<http://java.sun.com/docs/hotspot/>

Restricting Search Look-Up Time

Administrators can use the `search-lookup-limit` parameter in the `config/csid.conf` file to restrict look-up time so that users do not over-tax a Compass Server machine by executing queries that are not defined correctly. (Using `?`, `?*` or `??*` in a search string are examples of incorrect queries.) For example:

```
search-lookup-limit=-1
```

The default value, which is `-1`, allows unrestricted lookup time. The time unit is in milliseconds.

Characters in Taxonomy

Characters allowed in Compass Server's taxonomy, in addition to the alphanumeric character set, include the following:

- !
- &
- ,
- -
- .
- /
- ?
- _

In addition, a blank space () is allowed for separating two words (for example: `portal site`).

Known Problems and Limitations

This section lists known problems with this release of iPlanet Compass Server.

iPlanet Compass Server does not support double-byte character sets, such as Japanese, Korean and Chinese.

Workaround:

None.

How to Report Problems

If you have problems with iPlanet Compass Server, contact iPlanet customer support using one of the following mechanisms:

- iPlanet online support web site at
http://www.iplanet.com/support/support_services_10_0.html

From this location, the CaseTracker and CaseView tools are available for logging problems.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact customer support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Where to Find More Information

Useful iPlanet information can be found at the following Internet locations:

- **iPlanet release notes and other documentation** — <http://docs.iplanet.com/docs/manuals/>
- **iPlanet product status** — http://www.iplanet.com/support/technical_resources/
- **iPlanet Professional Services information** —
http://www.iplanet.com/services/professional_services_3_3.html
- **iPlanet developer information** — <http://developer.iplanet.com/>
- **iPlanet learning solutions** — <http://www.iplanet.com/learning/index.html>
- **iPlanet product data sheets** —
http://www.iplanet.com/products/product_map/product_name_2_0a.html

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