

IBM® Informix® Dynamic Server and Sun SPARC – Solaris 10

You can run IBM Informix Dynamic Server versions 7.31.UDx, 7.31.FDx, 9.40.UCx, 9.40.FCx, 10.00.UCx and 10.00.FCx on Sun SPARC machines running Solaris 10 subject to the constraints outlined below. For specific IDS versions which are certified for Solaris, please refer to the **IDS system requirements for Solaris** at:

<http://www.ibm.com/software/data/informix/ids/requirements.html>

Solaris 10 introduces a new feature called 'zones', which may be global or non-global. Non-global zones limit what programs such as IDS can do. For more details on the global zone and non-global zones, and how to setup and configure zones, please contact your System Administrator and consult the Solaris 10 documentation on zones. For a quick overview of Solaris zones, see:

http://www.sun.com/bigadmin/features/articles/zones_partition.html

If you configure Solaris 10 with non-global zones and run IDS in a non-global zone, you need to alter your IDS '**sqlhosts**' file. Also, some optional features of IDS will not work properly – though the server continues to run as if you had not attempted to use the features.

Solaris 10 configured without zones

An installation of the Solaris 10 OS becomes the **global zone** when it is booted by the system hardware. If you do not configure Solaris 10 with zones, all processes including any IDS instances will run within the global zone. You do not need any special setup or tuning to run IDS in the global zone. It is similar to running IDS on Solaris 8 or Solaris 9.

Solaris 10 configured with non-global zones

If you configure IDS properly, you can run it within a non-global zone.

SQLHOSTS Configuration

1. Hostname

The '**sqlhosts**' file under \$INFORMIXDIR/etc contains the connectivity information for each database server. If IDS is running within a non-global zone, then the "**hostname**" entry (third column) of the '**sqlhosts**' file should contain the "**hostname for the non-global zone**".

For example, suppose you have a Solaris 10 machine called '**mac1**' that is running an IDS server instance '**demo_ids**' within a non-global zone named '**my-zone**', and that the hostname for '**my-zone**' is '**ids**'; then the '**sqlhosts**' entry should be:

```
demo_ids ontlitcp ids demo_tcp
```

instead of:

```
demo_ids ontlitcp mac1 demo_tcp
```

(Note there is no IDS Server discovery across zones. The client running in the global zone, or in another non-global zone or on another remote machine would also use the hostname 'ids' in their 'sqlhosts' file to connect to the IDS instance within 'ids-zone')

ONCONFIG Configuration

1. Disabling Priority Aging (NOAGE onconfig parameter)

Operating systems lower the priority of processes as the processes run over a long period of time. In the absence of zones, setting NOAGE to 1 disables **priority aging** of CPU virtual processors by the operating system. When you set NOAGE to the default of 0, the operating system might lower the priority of CPU virtual processors, as well as other processes, as they accumulate processing time.

If you set NOAGE to 1 in the ONCONFIG file under zones, IDS will log the following error in the IDS server log file and then continue:

Could not disable priority aging: errno = 1

2. Forced Residency (RESIDENT onconfig parameter)

The RESIDENT parameter specifies whether shared-memory residency is enforced for the resident portion of database server shared memory.

If you set RESIDENT to 1 in the ONCONFIG file under zones, IDS will log an error message similar to the following in the server log file and then continue:

shmctl: errno = 1

Shared memory segment 0xa000000 could not be forced resident