ProcSee Troubleshooting

or

What to do if
ProcSee fails to start

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1 Installation Problems

ProcSee is delivered on a CD or can be downloaded from the Internet, www.ife.no/procsee.

1.1 Installation on the Windows platform

On the Windows platform an installation program starts automatically when the CD is inserted in the PC. If ProcSee is downloaded from the Internet, start the installation program by double-clicking the downloaded executable.

The installation program will install the required files and directories, update the services database and set the mandatory environment variables. If the installation program does not work properly, please ask for support at procsee-support@hrp.no.

1.2 Installation on Unix platforms

On Unix platforms, ProcSee is delivered as a set of tar files. Unpack the tar files according to the instructions on the CD or the download page on the Internet.

When the files have been unpacked, the environment variables must be set manually according to the instructions in the User's Guide.

The services database must also be updated manually according to the instructions in the User's Guide. Please note that this operation often requires super-user privileges. Contact your local system administrator for help.

2 Initial Start-up Problems

If the ProcSee RTM or GED fails to start, follow the instructions in this section to identify and solve your problem.

2.1 Test your computer configuration

ProcSee requires that your computer is correctly configured in order to function properly. A test program is provided to test your computer's configuration with respect to features required by ProcSee.

To start the test program, open a terminal window (Command Prompt on Windows platform) and go to the directory $PROCSEE_DIR\bin\$ARCH. Type `testComputerConfig` and press <enter>.

The test program performs the following tests, and prints the test results in its output window:

1. Test that the function *gethostname* functions properly and return the official name of your computer.

2. Test that the function *gethostbyaddr* can successfully look up 127.0.0.1. The address 127.0.0.1 is used for communication between processes running on the local computer.

3. Test that the function *gethostbyname* can successfully look up the name returned by the *gethostname* function.

If any of the tests above fail, the test program prints the error codes returned by the functions and exits. Please refer to your computer's documentation to configure your computer correctly and re-run the test program to verify your changes.

The test program can also be used to test the local computer's awareness of other computers. Hostnames and IP-addresses can be added as command line arguments, and `testComputerConfig` will look up each name or address successively and print the result. For instance, the following command will perform the tests listed above and also lookup the name and the address provided as command line arguments.

```
D:\> testComputerConfig miranda 158.36.60.102
Usage:
     testComputerConfig [hostnames] [addresses]

Tests your computer's configuration with respect to ProcSee/SWBus needs
Retrieves local computer's names and address
For each argument, retrieves names and addresses by local lookup

Test gethostname() function : OK
     gethostname() returned "pc-visit16"

Test lookup of "127.0.0.1" using gethostbyaddr() : OK
     h_name = localhost
     h_addr_list[0] = 127.0.0.1

Test lookup of "pc-visit16" using gethostbyname() : OK
     h_name = pc-visit16.hrp.no
     h_addr_list[0] = 158.36.60.207

Test lookup of "miranda" using gethostbyname() : OK
     h_name = miranda.hrp.no
     h_addr_list[0] = 158.36.60.103

Test lookup of "158.36.60.102" using gethostbyaddr() : OK
     h_name = cordelia.hrp.no
     h_addr_list[0] = 158.36.60.102
```

2.2   Test if control starts properly

Control is a small program providing the mapping from process names to host and port information. It is required to run on some computer in the network. All SWBus-based programs (like ProcSee RTM and GED) connect to control at start-up and register with their name, host and port.

On the Microsoft Windows platform, control is implemented as a service. To check if it is running, open your start-menu and select *Settings – Control Panel – Administrative Tools – Services*. This will open the standard Windows listing of all services on your computer. Scroll the list and search for "*SoftwareBus Control*". The service's status should be "*Started*", otherwise control is not running. If it is running, move on to section 2.3. If not, follow the instructions in section 2.2.1 below.

On Unix platforms, control is implemented as an ordinary program. It should normally be started as a background process and be left running "forever". If it for some reason fails to start properly, please follow the instructions below.

2.2.1   Identify why control won't start

Follow the steps below to figure out why control won't start.

1. Open a terminal window (Command Prompt on Windows platform)

2. Go to the directory where control is located: $PROCSEE_DIR/bin/$ARCH

3. Type the following command to start control:
    ./control –d ALL
    The –d ALL option tells control to provide extensive output on all its operations and is useful to figure out what is wrong. Control should respond with the following output:
    Control (SWBus Release 4.9 December 2011)
    and then type extensive information about the operations it performs and the results of these operations. Examine the output carefully to identify what causes the problem.

Reasons why control won't start are normally detected by the program *testComputerConfig*, described in section 2.1. If you fail to identify the reason why control won't start, send an email to procsee-support@hrp.no and ask for assistance. Attach the full output from control to your email.

Note that the most common reason why control won't start is that another instance of control is already running on the computer.

2.3   Test the state of control

If control is running properly, you are ready to connect to it and query for the set of process names, hosts and ports currently registered by control. A utility program called controlutil can be used to connect and check the current status of control. The steps below describe the procedure.

1. Open a terminal window (Command Prompt on Windows platform) on the computer where control is running. Go to the $PROCSEE_DIR/bin/$ARCH directory.

2. Type the command
    controlutil –h <hostOfControl> –q

Controlutil will then normally respond with the following message
    controlutil (SWBus Release 4.9 December 2011)
    Process information from control (4.9) at <host>/<port>:
    1: <procesName> class:<className> host:<host> port:<port> pid:<pid>
    2: ………………………………………………………………….………
    There are N processname(s) registered, M of these are connected

Note that the actual number of processes in the list above might be zero.

If controlutil does not reply as described above, but rather issues an error message, try running step 2 above once more adding the –d option as well. Controlutil will then provide a detailed description of the operations performed and the results of these operations.

2.3.1   Verify that RTM and GED is registered with control

When you can successfully test the state of control, you can use controlutil to verify that the RTM and GED has registered with control. When the RTM and

GED has successfully started, run controlutil as described above to verify that both processes are included in the list of processes.