

Installing



protop



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Before You Begin



ProTop depends on Progress' **Virtual System Tables** to operate. For best results please first ensure that your OpenEdge VSTs are up to date. If your database has been around for a while OpenEdge service packs and upgrades may have been applied. Many of these add new features to the VSTs and meta-schema that ProTop would like to utilize.

Unfortunately people often forget to run the proutil command to update those VSTs and meta-schema tables. To make sure that you are completely up to date shutdown your database and run:

```
proutil dbname -C updatevst
proutil dbname -C updateschema
```

If it is available ProTop will also take advantage of "dbanalys" data. You can create the needed output with this command:

```
proutil dbname -C dbanalys > dbanalys/dbname.dba
```

ProTop will look for the output file in the dbanalys sub-directory of the ProTop install directory. If found it will be used to give insight into table sizes and characteristics. It should be periodically refreshed (weekly is typical). (On large databases this command may take several hours to run – it is usually run during slow periods.)

Before You Begin



To get the most out of ProTop you will also want to be able to view table and index statistics. By default Progress only tracks the first 50 of each which severely limits their usefulness. While you have the database down to update VSTs from the previous step you should also ensure that you set the `-tablerangesize` and `-indexrangesize` parameters large enough to view all tables and indexes.

To determine "large enough" execute the following 4gl code snippet:

```
find last _file no-lock where _tbl-type = "t" use-index _file-number.  
find last _index no-lock where not _index._index-name begins "_" use-index _index-number.  
  
display  
  _file-number label "table range"  
  _idx-num     label "index range"  
.
```

We suggest rounding them up to the next 50 or 100 to allow for growth. These are server startup parameters that belong in your db server startup script, pf file or in `$DLC/properties/conmgr.properties` -> `otherargs`.



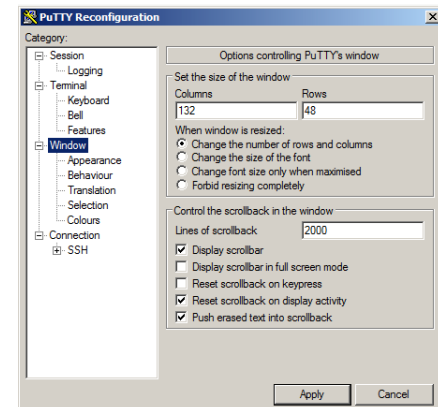
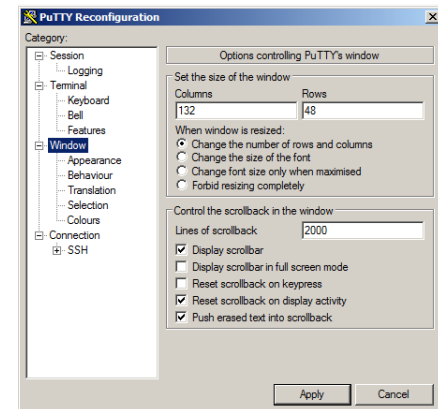
Prepare

- Pick a directory to install ProTop in. Create it if it does not exist.
- Do you need r-code?
- If you need r-code determine what version of OpenEdge you have.
- There are some OpenEdge version specific limitations to ProTop:
 - The ProTop interactive client supports OpenEdge 10.2 and greater
 - Partial client functionality is available for 10.1 and earlier – some features may not work
 - The data collectors (used by the web portal) work with 9.1 or higher
 - There is no version 9 r-code available at this time
- Does your site have a web proxy? If there is a web proxy in use we may need to know the proxy URL.

Prepare - UNIX



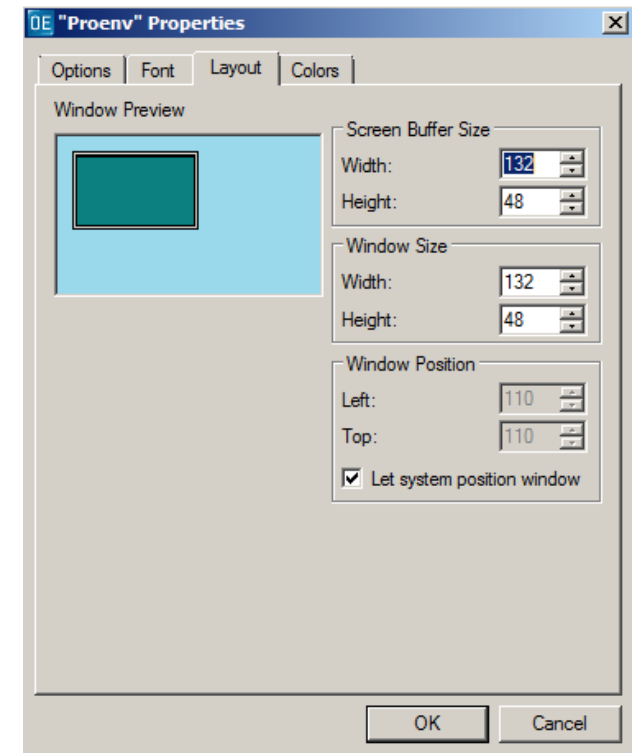
- Ensure that your terminal window is at least 132 columns wide and 48 lines tall.
- ProTop uses its own “protermcap” file (found in the etc subdirectory).
- Most emulators that support “xterm” should be fine.
- ProTop expects:
 - Delete = DEL
 - Functions keys are in “” mode





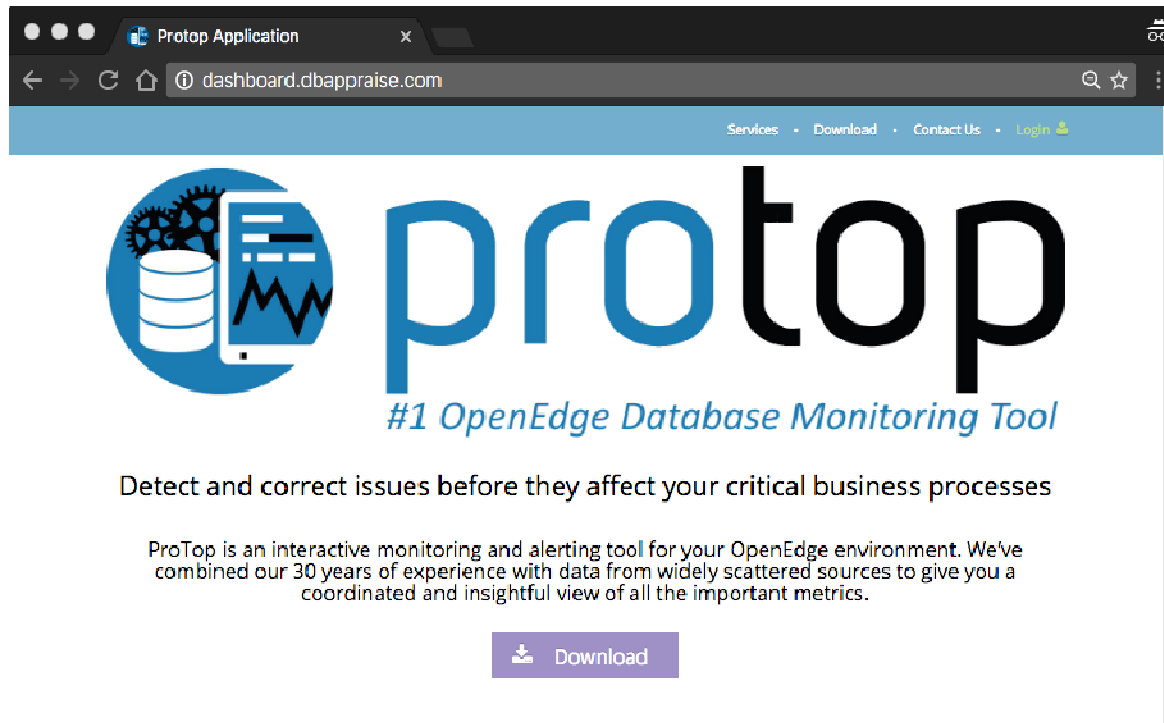
Prepare - Windows

- Right-Click the PROENV icon and select “Properties” and then “Layout” tab
- Ensure that the PROENV icon is at least 132 columns wide and 48 lines tall (both “screen buffer” and “window size”)
- If you have an old Progress release do NOT use the default height of 300. I find that 48, 64 or 72 work well.
- Change the font to something more pleasant such as Consola 14.
- The INI file used by ProTop is etc\protop.ini





Browse to the download page



Select your download type



Download form

Download

Optional Information

Name

Email

Company

Application name
(ex.: MFG/PRO)

Would you like to know more about ...

NO Monitoring and alerting

NO Guaranteed response-time, expert DBA support

NO Fully managed DBA services



Unzip and Install

- If necessary move the downloaded package to the install directory.

- UNIX:

```
$ gunzip pt3.3x-src.tar.gz
```

```
$ tar xvf pt3.3x-src.tar
```

```
$ ./pt3inst.sh
```

- Windows:

```
proenv> unzip pt3.3x-src.tar.zip
```

```
proenv> .\pt3inst
```

Install - Configuration



ProTop 3 Configuration

```
ProTop 3: /home/pt3n_____
OpenEdge: /usr/dlc_____
Log Files: /home/pt3n/log_____
Temp Files: /home/pt3n/tmp_____
Reports: /home/pt3n/rpt_____

Proxy: _____ (only if necessary!) i.e. proxy.xyzy.com:8080
```

ProTop 3 is being installed in: /home/pt3n
Detailed log is: pt3inst.log
Enter data or press F4 to end.

Note: The tmp and log dirs will be created if they do not already exist

Enter <GO> (F1 or CTRL-X) to advance to the next screen.

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Install Types

- Local install (no portal)
 - This install will have a blank custId and no interaction with the backend portal.
- Use an existing custId
 - You might use this if you are adding a server to an existing group of databases.
 - Or you may have made a special arrangement to have a pre-set custId ready for you.
- Create a new custId
 - Select this option if you wish to use the free dashboard. A random custId will be generated and assigned. You will need to provide a working email address for the final setup instructions to be sent to.



Select Install Type

ProTop 3 Install Type

A Customer Id is needed to enable data transfer to support the web portal. Your firewall must have port 80 open for outbound traffic on the db server for this to work.

If you do not wish to use the web portal choose the "Local" install type.

- Local install (no portal)
- Use an existing custId
- Create a new custId



Install – Existing Customer Id

Existing ProTop CustId

A Customer Id is needed to enable data transfer to support the web portal. Your firewall must have port 80 open for outbound traffic on the db server for this to work.

Enter your previously assigned custId below.

Customer Id: _____

Install – Create a new custId



————— New custId email address —————

A valid email address is required in order to send instructions to complete your portal setup.

Email Id: tom@wss.com_____

Company Name: Lift Line Skiing_____

————— Confirmation —————

Your new custId is z7956

An email has been sent to tom@wss.com with
instructions to complete your portal setup.

—————
<OK> <Help>

Note: Some European keyboard configurations may not be able to enter the “@” symbol.
In this case, please use <Alt>-64 to enter it.

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Configure Databases

Run the database maintenance tool `bin/dbmaint.<sh or bat>` to configure the database(s) you wish to have monitored:

```
bin/dbmaint .sh
```

Configure Databases



Fill in the required information

```
<insert>, ^T = insert new record.  
<delete>, ^D = delete record.  
<enter>      = update a record.
```

```
m = toggle 'Mon?' flag.
```

```
s = save changes.
```

```
x = save and exit.
```

```
q = quit without saving.
```

friendlyName	dbPath	Mon? Type
>s2k	/home/pt3dev/sports2000	no



Configure Databases

- Friendly Name: Enter a unique short name ("friendly name") for the database and the full path.
- If you would like to upload data to the web portal, enter "yes" in the "Monitored" field.
- Use <Ctrl-X> to save the database information; Enter <Ctrl-T> to insert a new line for additional databases.
- When you're done adding databases, hit "x" to save and exit



Advanced Configuration

- `etc/highlight.cfg`:

This file controls the color-coding in ProTop. Adjust the threshold values to display warning and alert colors in ProTop.

- `etc/email.cfg`:

This file contains the email command for your system and is used when you select option "M" in ProTop (Send Screen capture to an email). The defaults are sufficient for 99% of *nix and Windows systems.



Launching ProTop Character

To access the character version of ProTop, type the following from the protop install directory:

```
bin/protop <friendlyname>
```

```
Auto Interval Rate JSON 15107 0 0.028 ProTop Version 3.3n
sports2000 0 0 /db/sports2000 ip-172-31-17-218
```

Hit%	100.00	Commits:	0	DB UpTime:	00:12	Oldest TRX:	00:00:00	Connections:	5
Log Reads:	865	Undos:	0	Bkp Age:	02:41	Curr BIClstr:	0	Brokers:	1
OS Reads:	0	Lock Tbl HWM:	2			Oldest BIClstr:	0	4gl Servers:	0
Rec Reads:	276	Curr # Locks:	0	New RM:	0	Num BIClstrs:	0	SQL Servers:	0
LogRd/RecRd:	3.14	Modified Bufs:	0	From RM:	0	BI MB Used:	0	4gl Clients:	2
Log Writes:	0			From Free:	0	Curr AI Extent:	5 of 5	SQL Clients:	0
OS Writes:	0	IO Response:	0.02	Examined:	0	Curr AI Seq#:	5	App Server:	0
Rec Creates:	0	BogoMIPS:?		Front2Bk:	0	Empty AI Exts:	4	Web Speed:	0
Rec Updates:	0	BogoMIP%:	0.00	Remove Lk:	0	Full AI Exts:	0	BIW:	0
Rec Deletes:	0					Locked AI Exts:	0	AIW:	0
Rec Locks:	77	Notes:	0			APW Writes:	0	APWs:	0
Rec Waits:	0	BIW/AIW Write%				APW Write%		WDOG:	0
Idx Blk Spl:	0	Writes to Log:	0			BuFs Scanned:	0	Local:	1
Resrc Waits:	0	BIW/AIW Writes:	0			APW Scan Wrts:	0	Remote:	0
Latch Waits:	0	Partial Buf Wr:	0			APW Q Wrts:	0	Batch:	1
pica Used:	0	Busy Buf Waits:	0			Chkpt Q Wrts:	0	TRX:	0
pica Used%	0.00	Empty Buf Wts:	0			Flushed BuFs:	0	Blocked:	0

```
>
```

Table Activity											
Tbl#	Area#	Table Name	RM	Chain	#Records	Turns	Create	Read v	Update	Delete	OS Read
>	1	7 Benefits			21	0.00	0	0	0	0	0
	2	7 BillTo			2	0.00	0	0	0	0	0
	3	7 Bin			770	0.00	0	0	0	0	0
	4	7 Country				0.00	0	0	0	0	0
	5	7 Customer			1117	0.00	0	0	0	0	0
	6	7 Department			7	0.00	0	0	0	0	0
	7	7 Employee			55	0.00	0	0	0	0	0
	8	7 Family			72	0.00	0	0	0	0	0

```
>
```

User IO Activity												
Usr#	Tenant Name	PID	Flags	Blk	Ac v	OS Rd	OS Wr	Hit%	Rec Lck	Rec Wts	Line#	Program Name
>												

DBMonitor



- Enables communication to the Portal
- Checks for updates
- Starts and stops agents for monitored databases
- Scans .lg files
- Sends heartbeat messages



Enable DBMonitor - UNIX

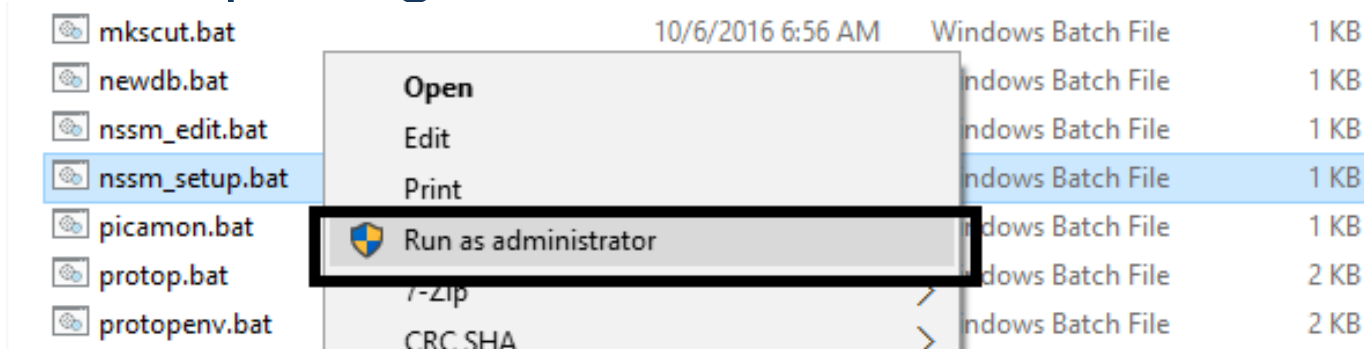
- Simply add the cron entry found in etc/crontab.pt3 - i.e.

```
# ProTop 3.x Monitoring
#
# launching every 15 minutes allows quick restart after system reboots or db crashes
#
0,15,30,45 * * * * /home/pt3n/bin/dbmonitor.sh >> /home/pt3n/log/dbmonitor.cron.log 2>&1
```



Enable DBMonitor - Windows

- Verify if ProTop DB Monitor Service has been added in Windows Services.
- Create service by launching bin\nssm_setup.bat with “Administrator” privileges:





Windows – Create Shortcuts

- Create desktop shortcut for Protop by executing:

`bin\mkscut.bat <FRIENDLY NAME>`

Example: `proenv> c:\Protop\bin\mkscut.bat s2k`





Web Portal Setup

- Verify that you can reach `dashboard.dbappraise.com:80` from your server:
`wget dashboard.dbappraise.com`
- If you chose to have a custId created during the installation, you will receive instructions by e-mail with the subject “New ProTop custId” outlining instructions on how to access the web portal and how to complete the configuration.



Web Portal Setup

- Refer to the e-mailed instructions on how to:
 - Log in to the ProTop Dashboard
 - Launch and schedule the ProTop3 DB Monitor (dbmonitor.sh for UNIX)
 - Add the corresponding “resource” (database) in the ProTop Dashboard
- **Note:** The DB Monitor reads etc/dblist.cfg and starts (or stops) ProTop agents that have the monitored flag set. If util/dbmonitor.p is running, the changes are implemented as soon as they are saved. There is no need to restart dbmonitor.



Stopping Agents

- Remove .flg files from the ProTop tmp directory to stop agents

```
cd tmp  
rm pt3agent.<friendly name>.flg
```

- Agents will auto-restart if they are scheduled in cron (UNIX) or if the ProTop DB Monitor service (Windows) is running
- Check for the ./util/dbmonitor .p
 - UNIX: `ps -ef|grep util`
dba 38596 1 0 Aug16 ? 00:00:39 /dlc/bin/_progres -1 -b -p
./util/dbmonitor.p -param pt3test
 - Windows: Check Windows Task Manager for _progres with similar command line as above



Debugging

- Review log and error files:
 - log/dbmonitor.log
 - log/pt3agent.<FRIENDLY NAME>.log
 - err/dbmonitor.err
 - err/pt3agent.<FRIENDLY NAME>.err



Updates

- Run `bin/pt3upd.sh <version>` to update your ProTop installation
 - On Windows, run `bin/pt3upd.bat <version>`

- Example:

```
cd /usr/protop/bin  
./pt3upd.sh pt3.3n
```