

Using Tower Vacuum Supervisor Application

Presentation :

This application is dedicated to configure and supervise all the OS9 servers who drive towers pumping stations .
Pumping stations list is defined on Db database like 'Partition' .
These 'Partition' could be looked with VMMClient or Db editor,
Partitions names are :
Tov/Partition/TovTest
Tov/Partition/TovGeneral .

Supervisor application is composed of one server and clients.
Server and clients are running on UNIX workstations or X terminals.
Supervisor server can get mastership on one or all pumping benches.
Only one client can be master on supervisor server.
This application can't activate pumping elements, only ToLocalClient or 'Tour' client can do it.

Launch Supervisor Server .

- Open a session on UNIX workstation dedicated to the vacuum control station.
 - Loggin under 'virgorun' account.
 - Type : `cd /virgoApp/To/ToVSU/version/mgr`
or `cd /virgoDev/To/ToVSU/version/mgr`
 - Type : `ToVSU.csh 'Partition Name'`
(Ex: `ToVSU.csh Tov/Partition/TovTest`)
- Reminder : version is the ToVSU package version in use (ex: v1r1).

It is better, that all OS9 servers describe in the partition was launched, before to launch supervisor server .
Nevertheless, if it's not true, supervisor application must work normally but supervisor will not receive data about OS9 servers launched later.
For receive data from a new OS9 server , click on 'Request_Configured' on the supervisor client (see Supervisor Client).

Launch Supervisor Client .

- Open a session on UNIX workstation dedicated to the vacuum control station.
- Loggin under 'virgorun' account.
- Type : `cd /virgoApp/To/ToVSUUI/version/mgr`
or `cd /virgoDev/To/ToVSUUI/version/mgr`
- Type : `ToVSUC.csh 'Partition Name'`
(Ex: `ToVSUC.csh Tov/Partition/TovTest`)

Reminder : 'Partition Name' must be the same that 'Partition Name' used by server .
If the client is launch before server, you must reconnect it to the server.

Screen Display :

A main window appear. It compose of 5 drawing parts and a menubar .

Menubar functions description .

MainControl

- 'Stop Supervisor' : Stop supervisor server connected to the client and OS9 servers .
- 'User' : Display on terminal a specific window dedicated to the pumping.
With this specific window, you can survey all bench stations.

Clients

- '\$TOUIROOT/mgr/ToLocalClient.csh' : Launch a 'local' client allowing to drive pumping bench.
A small window appear 'client_INFO', you must write the bench name to drive (Ex: ToBs), and validate when click on 'Ok' .
- '\$TOUIROOT/mgr/Tour.csh' : Launch a 'Tour' client .
A small window appear 'client_INFO', nothing to write, only validation by a click on 'Ok' .

Partitions

- 'Reconnect' : Reconnect supervisor client to the supervisor server.

For functions not describe here, see 'Su Package' documentation .

Drawing parts description .

- 'Virgo Partitions' : Display of general partition of pumping tower.
If partition color is green, this indicate that all OS9servers describe in the partition are managed .
If partition color is red, this indicate that one or most OS9server describe in the partition are not managed because it's not probably launch. In this event, you must launch OS9server not managed and reconfigure it, or delete in the partition this OS9server.
- 'Servers of Current Partition' : This indicate the active partition who supervise pumping stations (OS9 servers) describe in this partition.
In this part, you can set or unset mastership of supervisor client on supervisor server, when you click on 'name of partition' rectangle .
BE CAREFUL if you select 'Stop partition', all towers servers managed by the partition are stopped !!!
If you click on one of 'Server Name' circle, you see the OS9Server status.
BE CAREFUL you can stop OS9server selected if you click on 'Stop Process'.
'Server Name' appear like : `Tov/Activation/XX`
XX is the name of selected station (Ex: ToBs).
This click update 'Status of Tov/Activation/XX' part .
Reminder: Partition status is indicated by a color.
Green : Supervisor server has succeed to connect all towers pumping stations (OS9servers).

Red : There is connection failure at least on towers pumping stations.
 Grey : Supervisor server was stopped .
 - 'Status of Tov/Activation/XX' : Indicate the status of OS9server selected in the 'Servers of Current Partition' part .
 For tower vacuum supervisor application, there are 5 status define:
 Idle -> OS9server is alive and connected.
 Configured -> OS9server was configured (valve,pump,gauge...controllers are running).
 Active -> 10-8mBar< Gd2 pressure < 10-5mBar and valve Vd1 opened, this status is only for UHV Towers.
 GoldenState -> Gd2 pressure < 10-8mBar and valve Vd1 opened for UHV Towers.
 Gc3 pressure < 10-5mBar and valve Vc1 opened for HV Towers.
 End -> OS9server was stopped
 Error status is not yet define.
 - 'Status of Tov/Partition/TovXXX' : This is a global status of the partition (Ex: if one OS9 server was Configured but other are Active or GoldenState, global status is Configured. it's always the lower status among all status). In this part, you can configure all OS9 servers, when you click on 'Request_Configured'. Configurations are sending to all OS9 servers describe on the partition. For configure pumping stations, the supervisor client must be master on supervisor server; and the supervisor server must be master on all OS9 servers .
 - Information list about supervisor working.

Specific window dedicated to the pumping.

This window was composed of 3 parts .

- A table who display mains informations of all bench stations :
 'Upper Pressure' : Pressure in the upper part of towers, by Gc1 and Gc2 and Gc3 gauges.
 'MiddlePressure' : Pressure in the intermediate part of towers, by G81. Only for UHV bench.
 'LowerPressure' : Pressure in the lower part of towers, by Gd1 and Gd2 and Gd3 gauges. Only for UHV bench.
 'Vc1' : Status of valve Vc1 .
 'Vd1' : Status of valve Vd1 . Only for UHV bench.
 'V81' : Status of valve V81 . Only for UHV bench.
 Status can be : open close translate or error .
 'ServerState' : Status of supervisor server on OS9 servers.
 Status can be : Disconnected Slave or Master .
 'SequenceState' : Status of pumping sequences.
 Status define by a 'ToLocalClient' or 'Tour' client.
 'Alarm' : information default light. If color is red -> a default was appear on a bench station since the supervisor was launch.
 For read default, click on this information light .
 - A synoptic named 'Stations', represent all bench pumping stations.
 When you click on the small red square of one of these station, you set or unset mastership on this selected station.

If the big square become green, server supervisor is not master on this selected station.
 If the big square become red, server supervisor is master on this selected station.
 If the big square become blue, selected station was disconnected.
 When you click on big square of one of bench station, this display in the 'Controller Status' part , the status of controllers managed by the OS9 server of bench station selected.
 - A synoptic named 'Controllers Status'. This part indicate the status of controllers driven by OS9 server.
 Green color represent an active controller, red color represent a controller stopped, grey color represent a controller not configured .
 You can run or stop a controller, by clicking on a controller circle .
 - A small text window to display informations. If an information appear, window background set to color red, to clear window double-click on this window.

Watching Logfiles .

 Open a UNIX window.

If the directory /virgoData exist :
 Type : cd /virgoData/To

ToVSUUserManual.txt: END

Else : For VSU Client

Type : cd /virgoApp/To/ToUI/version/data
 or cd /virgoDev/To/ToUI/version/data
 remind : version is the To/ToUI package version in use
 (ex: /virgoApp/To/ToUI/v1/data).

For VSU server
 cd /virgoApp/ToVSU/version/alpha
 or cd /virgoDev/ToVSU/version/alpha

Type : ls *.log*

For a supervisor client file :
 Type : more VSUClient_x.log
 remind : x is a number of your supervisor client.

For a supervisor server file :
 Type : more Su_<PartitionName>.log
 (ex: Su_Tov_Partition_TovTest.log)

See also :ToUserManualV1.txt