Swivel Appliance Console Management Interface Version 2.0.14

Last Revision January 2012

Contents

1 Introduction

This document describes the functionality and use of the Swivel Console Management Interface menu (CMI). This document is meant for advanced users, and will assume some knowledge of the Swivel application.

Additional information on Swivel and the appliance is available from articles:

- Appliance User Guide
- HA Options

2 Glossary

There are a range of terms used to describe different Swivel appliance configurations. These are defined below for clarity.

Active	A Swivel appliance that is currently up and running and able to authenticate users.
Passive	An appliance in Standby mode is not running Swivel and cannot authenticate users.
Primary	A Primary appliance is one that by default controls any resources shared with any other Swivel appliance.
Secondary	A Secondary Swivel appliance is one that, by default, does not control resources shared with other Swivel appliances.
Database Master	In a replicated database configuration, a master server can write to the database and those changes will be replicated to other Database Masters and Database Slave servers.
Database Slave	In a replicated database configuration, any changes made to a Database Slave server will not be replicated across to the other servers.
Synchronised	A Synchronised appliance is connected to an external repository, and, as such, will add, update and delete Swivel user accounts.
Single/Standalone	A Standalone Swivel appliance is not connected to an external repository and therefore will not create or delete PINsafe accounts. Generally it will share a database with a synchronised appliance.
DRBD	Service for sharing a disk partition between two appliances.

3 Scope

The PINsafe CMI provides a means to control the appliance from a console screen or SSH screen.

The CMI is used to configure or change the appliance configuration, and to assist in support tasks.

4 Standard Functionality

The CMI has the following standard functionality:

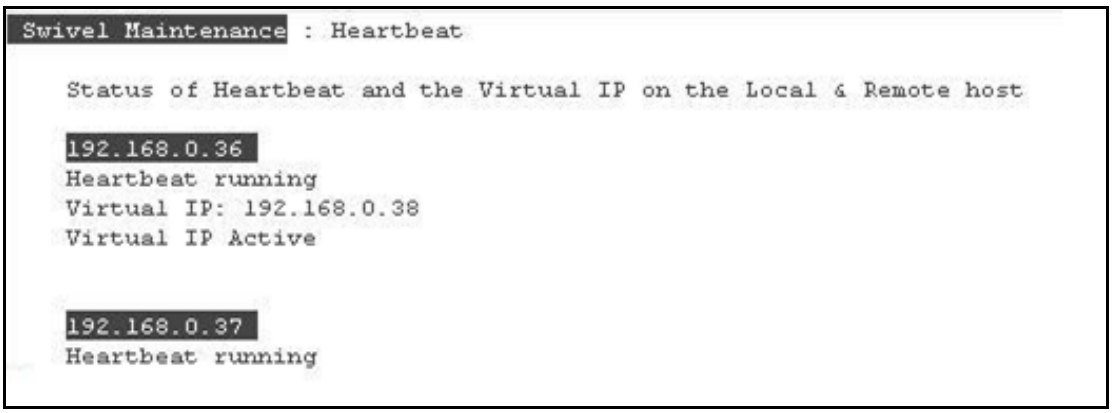
Tomcat	Start, Stop and Restart for the Tomcat service
Heartbeat	Start, Stop and Status for the Heartbeat service
Monitor	Start and Stop for the Monitor service
MySQL	Control MySQL DB
DRBD	Start, Stop and Status for the DRBD service
Sendmail	Start, Stop and Status for the Sendmail service
SNMP	Start, Stop and Status for the SNMP service
Backup & Restore Options	Backup and restore options for Swivel and the appliance
Advanced Options	Maintenance and installation options

4.1 Tomcat

The menu allows the service to be started or stopped. An option to restart the service is also available. The CMI will report on the current state of the service as either running or stopped.

4.2 Heartbeat

The menu allows the service to be started or stopped. The Status option will report on the service as either running, or stopped. If the service is running and a virtual IP has been configured, it will be displayed along with the IP address of the appliance that is currently in control of the virtual IP.

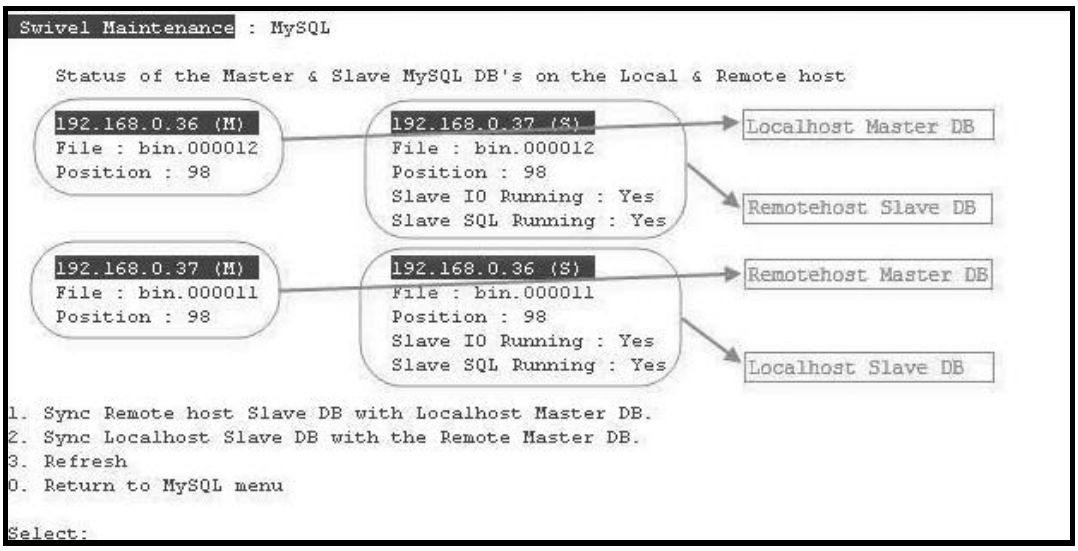


4.3 Monitor

The menu allows the service to be started or stopped. The CMI will report on the current state of the service as either running or stopped.

4.4 MySQL

The menu allows the service to be started or stopped. The status option will report on the service as either running, or stopped. When checking on the status of the service both appliances in the HA solution will be queried. In addition it is possible to stop the slave DB which is used as part of the DB replication configuration.



The status check screen enables the user to resolve various issues which may occur with a replicated database HA solution.

Option 1. Sync Remote host Slave DB with Localhost Master DB
Compares the File and Position records on the Slave DB Remote appliance with the File and Position records on the Master DB Local appliance. If they are different this option will resynchronise the pointers and copy data from the Local Master DB to the Remote Slave DB.

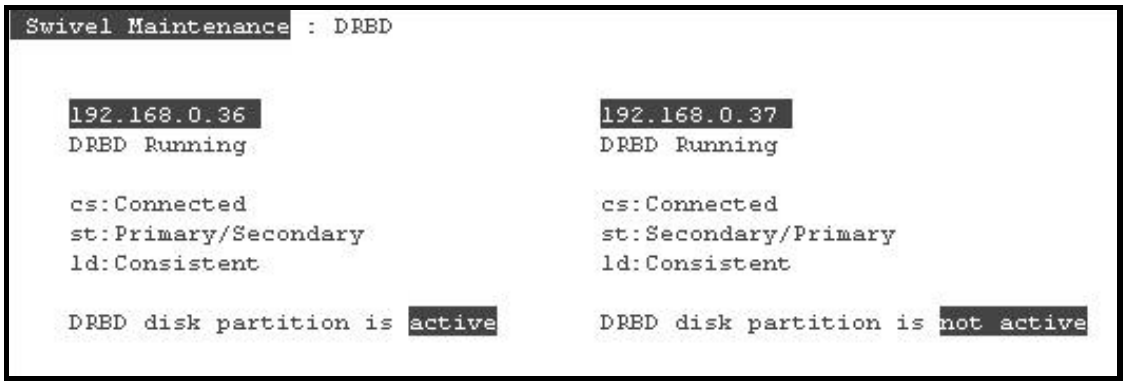
Option 2. Sync Localhost Slave DB with Remote Master DB
Compares the File and Position records on the Slave DB Local appliance with the File and Position records on the Master DB Remote appliance. If they are different this option will resynchronise the pointers and copy data from the Remote Master DB to the Local Slave DB.

Option 3. Refresh
Refresh the screen to reflect changes made by the synchronisation options.

The MySQL command Line provides access to the MySQL interface. Caution should be used with this option, and the user should be following direct instruction from Customer Support. Incorrect use of the MySQL interface could cause Swivel to stop authenticating requests.

4.5 DRBD

The menu allows the service to be started or stopped. The status option will report on the service as either running, or stopped. When checking on the status of the service both appliances in the HA solution will be queried.



The Status screen allows the user to check quickly and easily if the DRBD service is running, the HA pairs are connected and that they are in a Consistent state.

The CMI enables the user to resolve various issues which may occur with a DRBD HA solution.

Option 1. Synchronise Remote host to Localhost
The CMI automatically evaluates the states of the DRBD service. If the databases are not in a consistent state the option to synchronise them will be offered.

4.6 Sendmail

The menu allows the service to be started or stopped. The status option will report on the service as either running, or stopped.

4.7 SNMP

The menu allows the service to be started or stopped. The status option will report on the service as either running, or stopped.

4.8 Backup & Restore

4.6.1 The CMI features comprehensive backup and restore functions. There are three main backups that may be taken:

4.6.1.1 Full backup including appliance configuration and Swivel application

4.6.1.2 Backup Swivel and Swivel configuration files

4.6.1.3 Backup network configuration files.

4.6.2 Each backup may be restored, using the appropriate menu option or copied to a different PINsafe appliance.

4.6.3 Backups are automatically purged after a defined period of days. They may also be manually purged if required.

4.6.4 A bare metal recovery CD may be manually created to help with the restore process.

5 Advanced Functionality

The CMI has the following advanced functionality:

Menu Item	Description
Version Information	Displays version information relevant for the Swivel appliance
Default Running Services	Enables services to be automatically started/stopped after a reboot
Change Hostnames	Change an appliance hostname
Change IPs & Routing	Change a network card IP address, and associated routing
Change NIC speeds	Change a network card speed
Change DNS Servers	Change DNS IP address on an appliance
RAID status	Shows the RAID status of the appliance drives and controller
Admin Menu	Options to reboot, or shutdown the appliance. Restart the NICs, and to change various system passwords
Command Line	Provide access to the Linux command line

5.1 Version Information

Menu to view the version numbers of the core applications applicable to Swivel. Includes 'open source' software Tomcat, MySQL and Webmin and the versions of Java, Swivel, and the Appliance.

5.2 Default Running Services

Menu to check if services (Tomcat, Mon, Heartbeat, DRBD, Sendmail, SNMP & MySQL) will automatically start following a reboot. Functionality controls if a service should start automatically after a reboot.

5.3 Change Hostname

Menu to allow the hostname to be changed on an appliance. The hostnames on an Active/Acitve pair must both be changed to reflect each other.

5.4 Change IP Address

5.4.1 Menu to view all the IP addresses currently used by the appliance and associated software.

5.4.2 Menu to allow any IP addresses on the appliance to be changed.

	Item	Default Value	New Value
1.	IP Address	192.168.0.36	
2.	Network Address	192.168.0.0	
3.	Broadcast Address	192.168.0.255	
4.	Default Gateway	192.168.0.36	
5.	Other appliance in HA pair	192.168.0.37	
6.	Virtual IP	192.168.0.38	

5.4.3 Menu to allow the IP addresses used for DB Replication to be changed.

	Item	Default Value	New Value
1.	Primary Replication IP	172.016.0.1	

2. Network Address 172.016.0.0
3. Broadcast Address 172.016.0.255
4. Other appliance in HA pair 172.016.0.2

Addresses used for Replication should not normally be changed. This option should only be used by experienced users.

5.5 Change NIC Speeds

Menu to allow the speed of the network interfaces (NIC) to be changed.

5.6 Change DNS Servers

Menu to change the DNS servers used by the appliance. Currently only two DNS servers may be configured.

5.7 RAID Status

Menu to view the current status of the RAID drives and controller on the appliance.

5.8 Admin Menu

Menu to provide several miscellaneous administration level tasks:

- Reboot or shutdown the appliance.
- Reset the network interfaces.
- Change various system level passwords

5.9 Command Line

Menu to allow a user access to the Linux command prompt. The command prompt should only be used by an experienced user following the directions of Support staff.