

# SolusVM

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## Supported Features

Create	Cancel	Suspend	Unsuspend	Management	Config Options
YES	YES	YES	YES	YES	YES

## Management Features

This module supports the following management features within the client area:

- View Server Status
- Restart Server
- Shutdown Server
- Boot Server
- Reinstall to a New Template (*This deletes all existing data!*)
- Change Hostname
- Change Password
- View Stats (e.g. Bandwidth, Disk Space)
- Server Console

## API Versions

The following table lists version compatibility between the module and the SolusVM API.

Module Version	SolusVM API Version
3.0.0 or greater	1.16.10 or greater
1.0.0 - 2.8.0	~1.13.02 or greater

## Installing SolusVM

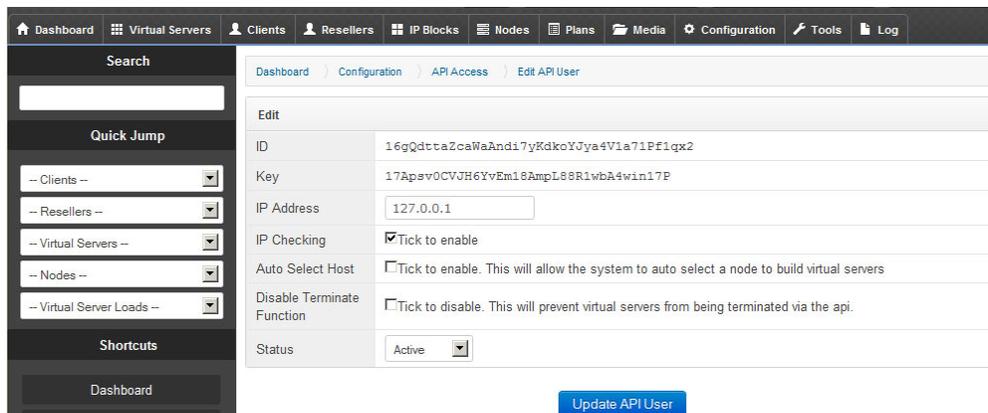
1. Visit [Settings] > [Company] > [Modules] > Available.
2. Click the "Install" button within the SolusVM module listing.

### Using KVM?

If you are using KVM and want to make a VNC console available to your users, you must copy the `/usr/local/solusvm/www/java/vnc` directory from your SolusVM master to `~/vendors/vnc` of your Blesta installation.

## Configuring SolusVM

In your SolusVM account, you will need to setup an API User, under [Configuration] > [API Access], to allow API requests to your server. Make note of the ID and Key fields set here, as you will enter them in Blesta. And set the IP Address field to the IP address of the server hosting your Blesta installation.



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Quick Jump

- Clients --
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Shortcuts

Dashboard

Dashboard | Configuration | API Access | Edit API User

Edit

ID	16gQdtta2caWaAnd17yKdkeYJya4V1a71Pf1qx2
Key	17Apev0CVJH6YvEm18AmpL88R1wbA4win17P
IP Address	127.0.0.1
IP Checking	<input checked="" type="checkbox"/> Tick to enable
Auto Select Host	<input type="checkbox"/> Tick to enable. This will allow the system to auto select a node to build virtual servers
Disable Terminate Function	<input type="checkbox"/> Tick to disable. This will prevent virtual servers from being terminated via the api.
Status	Active <input type="button" value="v"/>

[Update API User](#)

To configure SolusVM in Blesta, visit [Settings] > [Company] > [Modules] > Installed, and click the "Manage" button for the SolusVM module.

**Manage SolusVM**

[+ ADD SERVER GROUP](#)
[+ ADD SERVER](#)

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*SolusVM Master Servers*

Server Label	Hostname	Options
Test SolusVM Server	solusvm-dev.domain.com	<a href="#">Edit</a> <a href="#">Delete</a>

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*SolusVM Master Server Groups*

Group Name	Server Count	Options
Test SolusVM Group	1	<a href="#">Edit</a> <a href="#">Delete</a>

You may then add or update a server by setting the API credentials of an API User so that Blesta may communicate with the SolusVM server.

**Edit SolusVM Server**

*Basic Settings*

Server Label

User ID

Key

Hostname

SSL Port Number

[UPDATE SERVER](#)

## Module Options

Option	Description
Server Label	This is the friendly-name of the server used as reference throughout Blesta. Set it to anything you prefer.
User ID	The API User ID of the API user you have set in SolusVM.
Key	The API Key of the API user you have set in SolusVM.
Hostname	The hostname of the SolusVM server, without the protocol.
SSL Port Number	The port on which Blesta may connect to the SolusVM API at the given Hostname.

## Configurable Options Overview

This module supports configurable options which may alter the provisioning of SolusVM servers. Configurable Options override any matching Package settings.



### Not Required

Configurable Options are not required, and this list in no way limits the Configurable Options that can be created. However, only the following Configurable Options can alter the way SolusVM servers are provisioned.

Option Name	Possible Values	Recommended Field Type	Description
-------------	-----------------	------------------------	-------------

extra_ips	integer >= 0	Quantity, Dropdown	<p>Determines how many extra IPs will be assigned to the server.</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> It is recommended to set the <a href="#">config option</a> <i>Step</i> to 1 when using the Quantity type.</p> <p>The module allows for the removal of IP addresses one at a time. Using a Step value greater than 1 for a Quantity config option will disallow the removal of IP addresses through the module. This is because the decrement of a single IP address would no longer coincide with a valid <i>Step</i> as defined for the config option.</p> </div>
extra_disk	integer >= 0	Dropdown	<p>Sets the amount of extra disk space available for the server in GB (Gigabytes). This amount is <b>added</b> to the disk space currently set for the server's Plan.</p> <p>e.g. "20" to indicate an additional 20 GB of disk space</p>
extra_bandwidth	integer >= 0	Dropdown	<p>Sets the amount of extra bandwidth for the server in GB (Gigabytes). This amount is <b>added</b> to the bandwidth currently set for the server's Plan.</p> <p>e.g. "5" to indicate an additional 5 GB of bandwidth</p>
extra_cpus	integer >= 0	Quantity, Dropdown	<p>Sets the number of extra CPU cores available to the server. This number is <b>added</b> to the CPUs currently set for the server's Plan.</p> <p>e.g. "2" to indicate two more additional CPUs</p>
nodegroup	integer >= 1	Dropdown	<p>Sets the node group from which SolusVM will determine a node to assign the server to. This overrides the Package settings for node or node group.</p>
template	???	Dropdown	<p>Sets the name/filename of the template to install on the server. This will override the Package setting for Template. e.g. "centos-5.8-x86_64-solus-virtualmin"</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> After a service has been created, updating the template will not affect the service. The service's template may only be changed from the Reinstall action.</p> <p>Any pricing differences for the config option will still be incurred.</p> </div>
extra_memory	integer >=0	Dropdown	<p>Sets the amount of extra 'guaranteed' memory in MB (Megabytes). This amount is <b>added</b> to the memory currently set for the server's Plan.</p> <p>e.g. "512" to indicate an additional 512 MB of memory</p>
extra_swap	integer >= 0	Dropdown	<p>Sets the amount of extra swap/burst memory in MB (Megabytes). The amount is <b>added</b> to the swap/burst memory currently set for the server's Plan.</p> <p>e.g. "512" to indicate an additional 512 MB of swap</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> Setting <i>extra_swap</i> requires that the <i>extra_memory</i> option be set as well.</p> <p>If the server's plan does not provide any swap, and no extra swap has been set for this option, a value of 512 MB will be used by default.</p> <p>OpenVZ:</p> <ul style="list-style-type: none"> <li>▪ Only OpenVZ supports changing swap space after the server has been created. Changing swap for other virtualization types will have no effect.</li> <li>▪ OpenVZ servers will always have their swap/burst set to the same value as memory. If any <i>extra_swap</i> is specified, it will be added onto this total.</li> </ul> </div>

## Creating Packages



### Node Group Bug in SolusVM

There is a bug in SolusVM with the Default node group. If you select a node group for provisioning when creating a package, don't use the "Default" node group. First, create a new node group and assign your nodes to it in SolusVM. Then, select the new node group within the package.

## Welcome Email

When creating or editing a package that uses this module, the following tags will be available:

Tags	Description	Notes
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{module. host}	The host name of the server that the service was provisioned on	e.g. "domain.com"
{module. port}	The port number to connect on	Default is "5656"
{service. solusvm_vs erver_id}	The service field for the virtual server ID	e.g. "1"
{service. solusvm_co nsole_user}	The service field for the console username, if one exists	
{service. solusvm_co nsole_pass word}	The service field for the console password, if one exists	Console passwords expire after a certain time period, and need to be regenerated, so this value may not always be accurate
{service. solusvm_ho stname}	The service field for the service's host name	e.g. "my.domain.com"
{service. solusvm_ma in_ip_adde ss}	The service field for the service's main IP address	e.g. "127.0.0.1"
{service. solusvm_int ernal_ip}	The service field for the service's internal IP address	e.g. "10.0.0.1"
{service. solusvm_ext ra_ip_adde sses}	The service field for the extra IP addresses	This is a comma-separated list of extra IP addresses
{service. solusvm_no de}	The service field for the node ID that the service is attached to	e.g. "1"
{service. solusvm_us ername}	The service field for the account username	
{service. solusvm_pa ssword}	The service field for the account password	The password will only be shown for the first service of this type created for a client--when the customer account is first created in SolusVM. This field will be blank when additional services are created for this client because the existing account will be re-used, and the current password will be unknown.
{service. solusvm_pla n}	The service field for the name of the plan	
{service. solusvm_roo t_password}	The service field for the root password	
{service. solusvm_te mplate}	The service field for the name of the template	
{service. solusvm_typ e}	The service field for the type of SolusVM server the service is using	i.e. one of: "openvz", "xen", "xen hvm", "kvm"
{service. solusvm_virt _id}	The service field for the SolusVM virtual ID	e.g. "vm101 101"
{service. solusvm_vn c_ip}	The service field for the VNC IP address, if one exists	e.g. "127.0.0.1"; for HVM/KVM servers
{service. solusvm_vn c_port}	The service for the VNC port number, if one exists	e.g. "5901"

{service. solusvm_vn c_password}	The service for the VNC password	
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### Client Management

This module contains some client management features. Clients access this area by clicking the "Manage" button from within the client area for a service that uses this module.

#### Information

The screenshot shows a sidebar with 'Information' selected. The main content area displays details for 'SolusVM Xen 8 Nodes' with the following information:

<b>Package</b> SolusVM Xen 8 Nodes	<b>Status</b> Active
<b>Label</b> testuser.mynewusername.com	<b>Renew Date</b> Jul 19, 2014
<b>Creation Date</b> Jul 19, 2013	<b>Next Invoice</b> Jul 18, 2014
<b>Billing Cycle</b> 6 Months	<b>Recurring Amount</b> 1x \$300.00 USD

#### Server Actions

- Reboot
- Shutdown
- Boot
- Reinstall
- Change Hostname
- Change Password

The screenshot shows the 'Server Status' section with 'Online' and a row of action buttons: Reboot, Shutdown, Boot, Reinstall, Change Hostname, and Change Password.

#### Server Actions: Change Hostname

Useful for changing the hostname of the server.

The screenshot shows the 'Change Hostname' modal open. It includes a note: "A change to the hostname will only take effect after the server has been rebooted." Below this is a text input field containing 'testuser.mynewusername.com' and a 'Change Hostname' button.

#### Server Actions: Change Password

Useful for changing the root or Administrator password.

The screenshot shows the 'Change Password' section of the SolusVM management interface. On the left is a navigation menu with options: Information, Server Actions, Stats, Console, and Return to Dashboard. The main content area is titled 'Manage SolusVM Xen 8 Nodes - testuser.mynewusername.com'. It displays 'Server Status' as 'Online'. Under 'Actions', there are buttons for Reboot, Shutdown, Boot, Reinstall, Change Hostname, and Change Password. The 'Change Password' section includes two input fields: 'New Root Password' and 'Confirm Password', followed by a 'Change Password' button.

### Server Actions: Reinstall

Useful for re-installing the operating system.

The screenshot shows the 'Reinstall' section of the SolusVM management interface. The layout is similar to the previous screenshot, but the 'Reinstall' button is highlighted. Below the 'Reinstall' button, there is a 'Template' dropdown menu currently set to 'centos-5.8-x86\_64-solus-virtualmin'. A warning message states: 'I understand that by reinstalling, all data on the server will be permanently deleted, and the selected template will be installed.' A 'Reinstall' button is located at the bottom right of this section.

### Stats

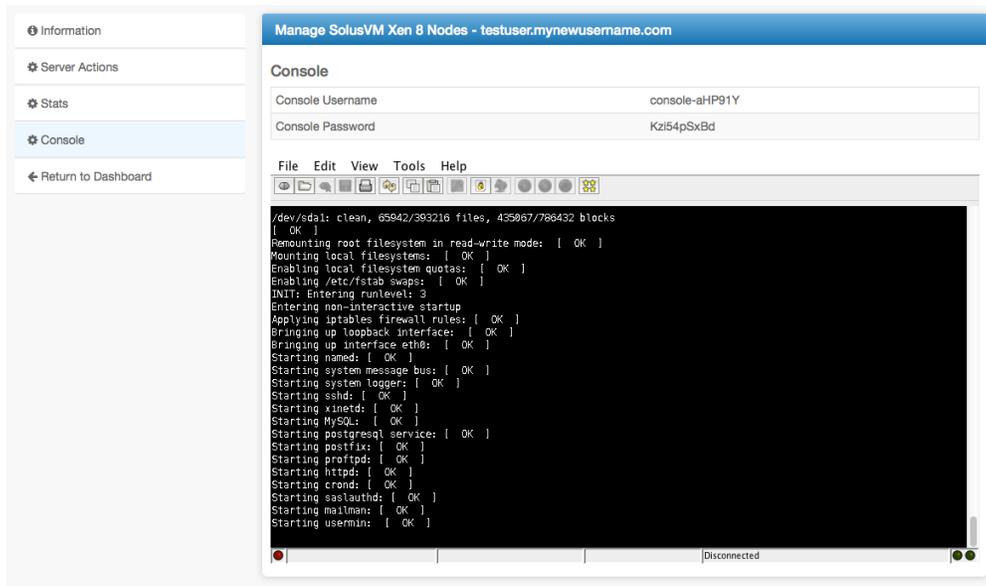
Shows statistics like monthly bandwidth, disk space usage, and a traffic graph.

The screenshot shows the 'Stats' section of the SolusVM management interface. It displays 'Bandwidth (213.55MB/100.00GB)' and 'Disk Space (1.25GB/3.00GB)' with corresponding progress bars. Below this is a 'Graphs' section with a traffic graph titled 'Traffic | 2014/05/19 10:46AM > 2014/05/20 10:46AM'. The graph shows incoming and outgoing traffic in bytes/sec. A summary table at the bottom of the graph provides the following data:

Direction	Max	Avg	Current	Unit
Incoming	416.2	21.4	0.0	bytes/sec
Outgoing	443.3	22.6	0.0	bytes/sec

### Console

A console, useful for accessing the server if it's inaccessible over the Internet.



## Common Issues

- The noVNC console doesn't work (Blesta 5.0+)
- Make sure an SSL certificate is installed on the master node, noVNC is enabled in the settings page in SolusVM, and that `/usr/local/solusvm/data/config.ini` has been created with the necessary parameters set. See <https://support.solus.io/hc/en-us/articles/360015040832-noVNC-does-not-work-and-HTML-5-console-fails-to-connect-Server-disconnected-code-1006>
  - This command can be run via SSH to generate the config.ini with the proper parameters:

```
echo [NOVNC] >> /usr/local/solusvm/data/config.ini; echo "use_remote_hostname = true" >> /usr/local/solusvm/data/config.ini; echo "socket_dest_public = false" >> /usr/local/solusvm/data/config.ini
```