

# openQRM ENTERPRISE

## DATASHEET

### KEY FEATURES



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#### OVERVIEW

openQRM is the most intuitive and powerful solution to building your Private Clouds and managing Data Centre virtualisation based on VMware, KVM and HyperV. Its integration with Microsoft Azure offers flexibility in creating hybrid cloud infrastructures, as well as with bare-metal providers like Puppet for effortless deployment of computing resources.

Our platform works on a modular structure, we provide a growing list of plugins for our framework allowing you to tweak the functionality and compatibility of the framework. This framework structure gives users the ultimate customisability they need to best suit their purpose.

Your Data Centre  
OpenQRM manages  
Computing , Storage,  
Network-Resources etc.

Computing  
Monitoring  
Network  
HA (High Availability)  
Storage

OpenQRM Back End  
Plug In API  
Hypervisor Connector  
Hybrid Cloud Connector



OpenQRM Cloud Marketplace

OpenQRM cloud Portal  
(Front - End)  
Web Interface for Internal  
& External Users





## WE ARE DISKLESS

We aim to make your workflow as efficient as physically possible, that's why our data centres are diskless. This minimizes processing times for file transfers, program deployment and virtual machine testing.



## COUNTLESS CONFIGURATIONS

openQRM offers an ever-growing library of plugins for the openQRM framework. This gives you the ultimate customisable experience, you can change the platforms functionality and compatibility with just a few steps.

We offer a free library of plugins on the openQRM website, and we also include a handful more with your license purchase. You can get a glance out our plugin library with the included Spec sheet.



## HYPERVISOR COMPATIBILITY

The openQRM platform wants to fulfil all needs for our clients. So, we are developing a framework that's compatible with all big-name Hypervisor programs; HyperV, VMWare and KVM, just to name a few.



## CREATE A HYBRID CLOUD

openQRM is moving towards being compatible with the most highly demanded third-party Cloud Computing services. The development team is currently working to redevelop AWS and OpenStack compatibility, and will be available in the future.



## MONITOR PERFORMANCE

Make sure your network and systems are performing as intended; our Enterprise Edition includes the Nagios and Collectd monitoring software. With these two programs included in the framework, you can monitor system performance, networks and even the infrastructure itself.

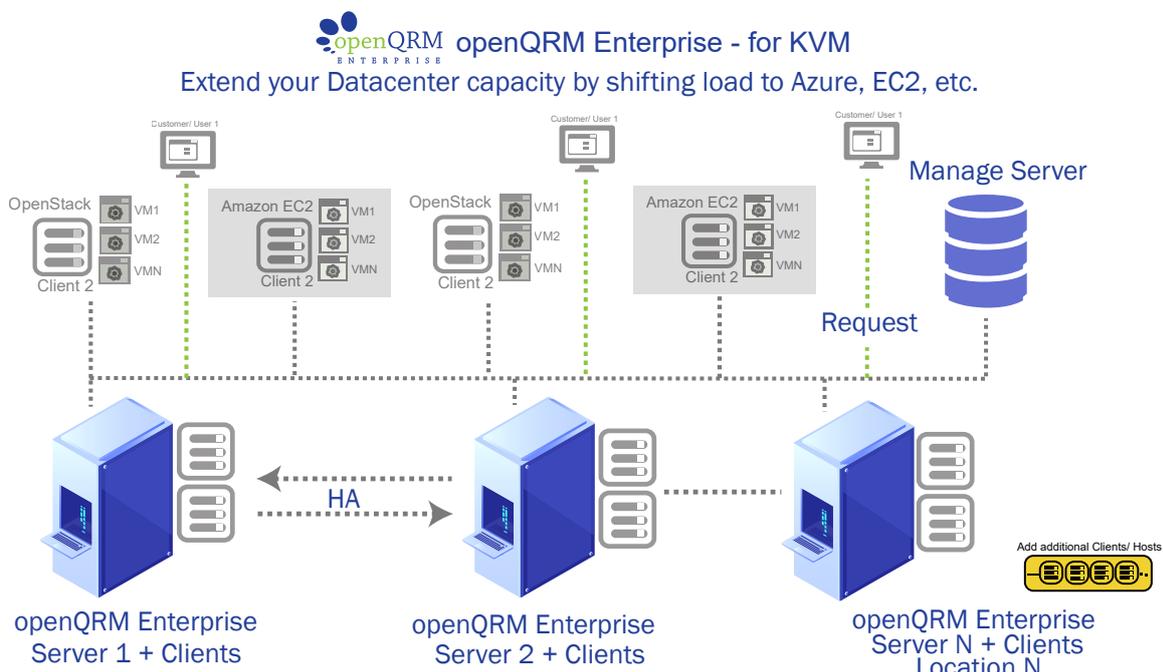
You can have the system alert users when a problem is detected, or something has changed, that way you can maintain the infrastructures condition to keep your workflow in tip-top shape.

# openQRM ENTERPRISE

## KEY FEATURES AND PLUGINS



|                                  |   |
|----------------------------------|---|
| <b>CLOUD PLUG-IN</b>             | The openQRM Enterprise Cloud front-end. Manage your own IaaS, PaaS, SaaS Private & Public Cloud with self-service front-end and integrated billing system. Let users self-service the cloud products that you define and make available.  |
| <b>CLOUD ZONES PLUG-IN</b>       | Manage multiple data centre locations with openQRM Enterprise Cloud Zones. Cloud Zones supports splitting one or more openQRM Clouds into multiple logical zones. For each Cloud Zone, the administrator can define fine-grained permissions, dedicated hardware and network-pools which can be assigned to Cloud User groups. Cloud Zones is completely independent of an existing openQRM Cloud installation and can be run on a dedicated system.  |
| <b>CLOUD MARKETPLACE PLUG-IN</b> | Applications on demand. The openQRM Enterprise Cloud Marketplace enables you to connect applications (& installer & license manager) directly to the corresponding infrastructure (EC2, Azure, On-Premise,..) via openQRM Enterprise. The applications obtain pricing and are made available in the self-service front-end - SaaS. Integrated billing allows cost-allocation. Simply make applications available faster, more efficient and in a more flexible way. Applications on demand without the IT overhead. |
| <b>CONTAINER DOCKER PLUG-IN</b>  | Support for managing Docker containers. Dev-Teams receive a secure collaboration possibility. Connect through the openQRM IaaS Cloud and work consistently on the same code-base with your colleagues.  |



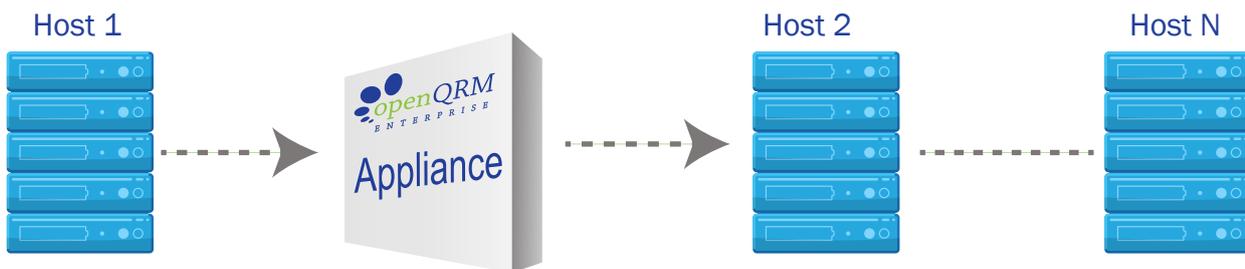
## DEPLOYMENT

|                                       |  |
|---------------------------------------|--|
| LINUXCOE PLUG-IN                      | Automated provisioning and lifecycle support of Linux systems.   |
| PUPPET PLUG-IN                        | Integrates Puppet for fully automated Configuration Management and Application deployment.   |
| AWS EC2 PLUG-IN (UNDER REDEVELOPMENT) | Public/ MultiCloud Amazon support. Manage & automate EC2. Extend your IT infrastructure flexibly by integrating external capacities.   |
| OPENSTACK PLUG-IN                     | OpenStack deployment. Fully automated OpenStack Cloud orchestration with openQRM Enterprise. Fully automatic Open Stack Cloud installation on bare-metal or VM.  |
| ANSIBLE PLUG-IN                       | Automated Configuration-Management with Ansible.   |
| CLONEZILLA PLUG-IN                    | Automatic disk-cloning with Clonezilla (local-deployment).   |
| ESXI BULK INSTALL PLUG-IN             | Bulk deploy VMware ESXi Hosts automatically. Automate VMware in your own Private Cloud and save license costs - No vCenter required. Our Plug-In offers automated configuration management for VMware VMs (Puppet/ Ansible). Features: vSwitch & Datastore Administration, VM Management, Host and VM Monitoring & High-Availability, VM Network/ IP Management. |
| IMAGE SHELF PLUG-IN                   | Pre-made Server Templates for network-deployment.  |
| WINDOWS PLUG-IN                       | Support for the Windows Operating System in openQRM.   |



## Built In Appliance HA

### Automatic High Availability Failover of openQRM Enterprise Appliance



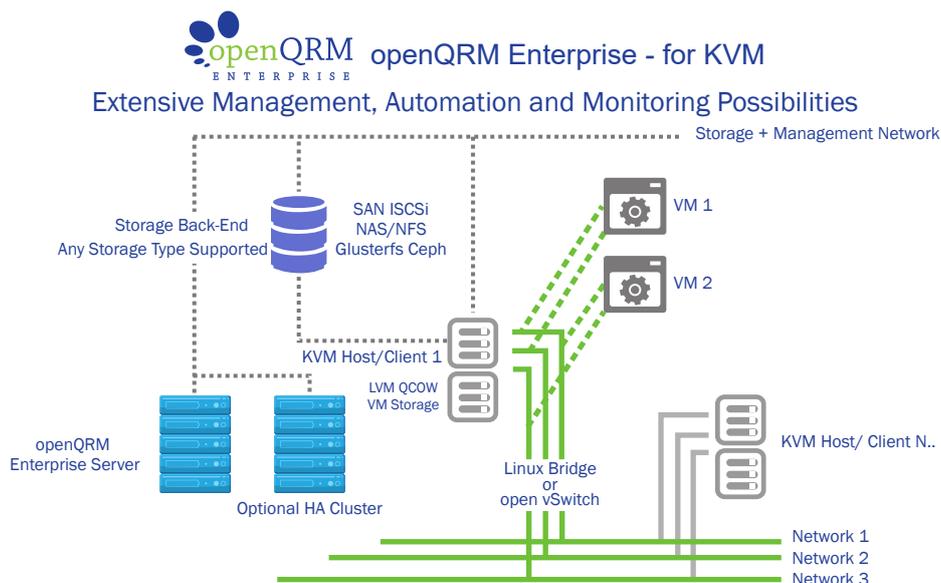
Lower your TCO with Increased Automation & Flexibility

## DOCUMENTATION

|                           |  |
|---------------------------|--|
| IDOIT PLUG-IN             | Automatic System Documentation (CMDB) with I-doit.   |
| HIGH-AVAILABILITY PLUG-IN | Automatic High-Availability for Appliances. HA for Servers deployed by openQRM is a built-in feature. openQRMs architecture is designed for High-Availability on the infrastructure level. |

## MONITORING

|                              |  |
|------------------------------|--|
| COLLECTD - NAGIOS3 PLUG-IN   | Monitor systems with Collectd providing long-term statistics and graphs. Automated systems and service monitoring.   |
| BANDWIDTH MONITORING PLUG-IN | Seamlessly gathers all specific interface and network statistics and presents them in a monthly performance metric. The bandwidth metering support in openQRM Enterprise works agent-less for physical systems and virtual machines and transparently integrates with your existing openQRM Enterprise infrastructure. |



Lower your TCO with Increased Automation & Flexibility

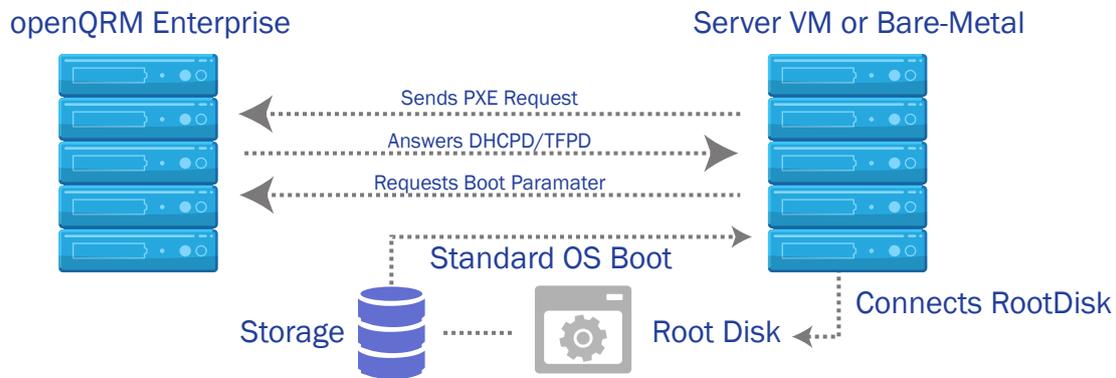
## MANAGEMENT

|                             |   |
|-----------------------------|---|
| DEVICE-MANAGER PLUG-IN      | Managing LVM (Logical Volume Manager).  |
| LCMC PLUG-IN                | Integrates LCMC (Linux Cluster Management Console) to manage Service-High availability.                                 |
| NOVNC PLUG-IN               | Integrates NoVNC providing a remote web-console for Virtual Machines and Physical Systems.                              |
| SSTERM PLUG-IN              | Integrates WebShell providing a secure login to the openQRM-server and the managed resources through the Web-interface. |
| LDAP PLUG-IN                | Central user management and authentication with LDAP/Active Directory (Lightweight Directory Access Protocol).          |
| ROLE ADMINISTRATION PLUG-IN | Role-administration provides permission management for openQRM Administrator User-groups.                               |
| DEVELOPMENT PLUG-IN         | API Documentation for your Plugin-Development.  |
| EVENT-MAILER PLUG-IN        | Configure and trigger event emails. Notification of critical events by email.   |
| LOCAL-SERVER PLUG-IN        | Integrates existing, local-installed Servers into openQRM (Includes Remote Server).                                     |

## MISCELLANEOUS

|                  |  |
|------------------|--|
| SUPPORT PLUG-IN  | Support by openQRM Enterprise.   |
| TEMPLATE PLUG-IN | A Template for Plugin-Development providing a complete Skeleton for your new Plugin. |
| IPMI PLUG-IN     | Automatically controls the power status of physical systems via IPMI technology.     |

## openQRM ENTERPRISE High Availability



Lower your TCO with Increased Automation & Flexibility

### NETWORK

|                         |  |
|-------------------------|--|
| DHCPD PLUG-IN           | Automatically manages IP-Addresses for the openQRM managed network.  |
| DNS PLUG-IN             | Automatically manage the DNS Service for the openQRM managed network.  |
| IP-MANAGEMENT PLUG-IN   | Network-management for the Appliances public IP-addresses.   |
| NETWORK-MANAGER PLUG-IN | A Network-manager to preconfigure network-bridges.   |
| TFTPD PLUG-IN           | Automatically managed TFTP server providing the pxe/TFTP network-deployment environment (in combination with the dhcpd plugin).  |
| OPEN V SWITCH PLUG-IN   | Allows dedicated & Isolated Cloud Networks per Cloud User. A Seamless Network Security Layer & VLAN Network Isolation for KVM Virtual Machines. Combined with openQRM's advanced automated DHCP/DNS service this provides a central, multi-homed network abstraction layer including transparent VLAN Support. |
| WAKE-ON-LAN PLUG-IN     | Automatically controls the power status of physical systems via the Wake-on-LAN (WOL) technology.  |

### STORAGE

|                         |   |
|-------------------------|---|
| AOE-STORAGE PLUG-IN     | Integrates AOE (ATA over Ethernet) as Storage technology (network-deployment).                |
| ISCSI-STORAGE PLUG-IN   | Integrates iSCSI Enterprise Target as Storage technology (network-deployment).                |
| LVM-STORAGE PLUG-IN     | Network-deployment. Integrates LVM2 with NFS/iSCSI/AOE as Storage technology.                 |
| NFS-STORAGE PLUG-IN     | Integrates NFS as Storage technology (network- deployment).                                   |
| SANBOOT-STORAGE PLUG-IN | Network-deployment. Integrates gPXE to boot Windows Systems directly from an iSCSI or AOE SAN |
| TMPFS-STORAGE PLUG-IN   | Network-deployment. Deploys Physical Systems and Virtual Machines 'in-Memory'.                |
| CEPH STORAGE PLUG-IN    | Integrates Ceph Storage technology.   |

### VIRTUALISATION

|                            |  |
|----------------------------|--|
| KVM VIRTUALISATION PLUG-IN | Support and connector for KVM virtualization technology. Profit from the technical benefits of KVM like hardware support, memory support and a high-security level all at the lowest ongoing cost. |
| CITRIX XENSERVEN PLUG-IN   | Support and connector for Citrix XenServer virtualization technology.  |