

HP Cloud Connector

Software Version: 1.10

Physical Infrastructure Reference Architectures (PIRA)

Document Release Date: December 2012

Software Release Date: December 2012



Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notice

© Copyright 2012 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

RED HAT READY™ Logo and RED HAT CERTIFIED PARTNER™ Logo are trademarks of Red Hat, Inc.

Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

Support

Visit the HP Software Support Online web site at: www.hp.com/go/hpssoftwaresupport This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support web site to:

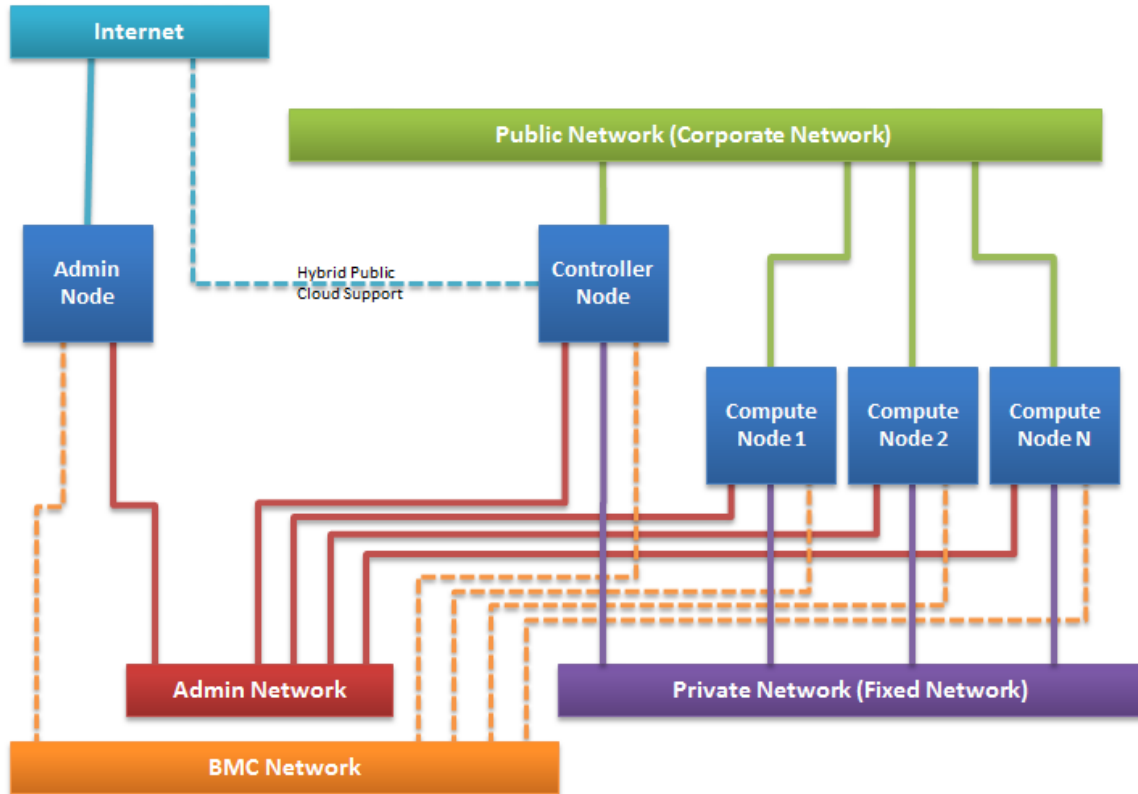
- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport user ID, go to: <http://h20229.www2.hp.com/passport-registration.html> . To find more information about access levels, go to: http://h20230.www2.hp.com/new_access_levels.jsp

HP Cloud Connector Physical Infrastructure Reference Architectures (PIRA)

Cloud Infrastructure

Logical Network Topology



Minimum Requirements

Server Configuration

Node Type	Virtual/Physical Node	CPU Cores	Memory	NICs	OS	Notes
Admin Node	Virtual Only	>= 2	>= 12GB	>= 2*	Ubuntu Server 12.04 LTS (64 bit)	* External Internet Connection Required
Controller Node	Either	>= 2	>= 32GB	>= 1**	Ubuntu Server 12.04 LTS (64 bit)	** External Internet Connection Required for Hybrid Cloud/HP Cloud (Public) Usage

Compute Node	Physical Only	>= 4***	>= 32GB	>= 1	Ubuntu Server 12.04 LTS (64 bit)	*** Intel or AMD Hardware Virtualization Support Required. The CPU Cores and Memory requirements must align with VM instances hosted by the compute node. Ideally, maintain 1 CPU core to 2 vCPU ratio.
--------------	---------------	---------	---------	------	----------------------------------	---

Switch Configuration

Must support 802.1Q specification (VLAN tagging/trunking) for tagged networks OR must provide physical switches and wiring for 3-4 networks, depending on cloud configuration.

Network Configuration

Network	Speed	Tagged*	Required	Notes
Admin Network	1gb	N	Y	
BMC Network*	1gb	Y (100)	N	* Bare-metal control network
Public Network*	1gb	Y (300)	Y	* Must provide a pool of IP addresses for floating IP assignments. Size of pool depends on usage requirements.
Private Network	1gb	Y (500)	Y	

* Default configuration of network tagging to combine logical networks on to a single physical network.

Storage Configuration

Node Type	Internal Storage	Partition Scheme	File System Mounts	Notes
Admin Node	>= 20GB			
Controller Node	>= 60GB	CSRA:Block Storage	/tmp: >= 200GB /var/lib/glance/images: >= 300GB* LVM Volume Group: >= 2TB	* Shared across controller and compute nodes
Compute Node	>= 60GB		/tmp: >= 150GB /var/lib/glance/images: >= 300GB*	* Shared across controller and compute nodes