

Quickstart Guide

FUJITSU Integrated System PRIMEFLEX for Hadoop Entry



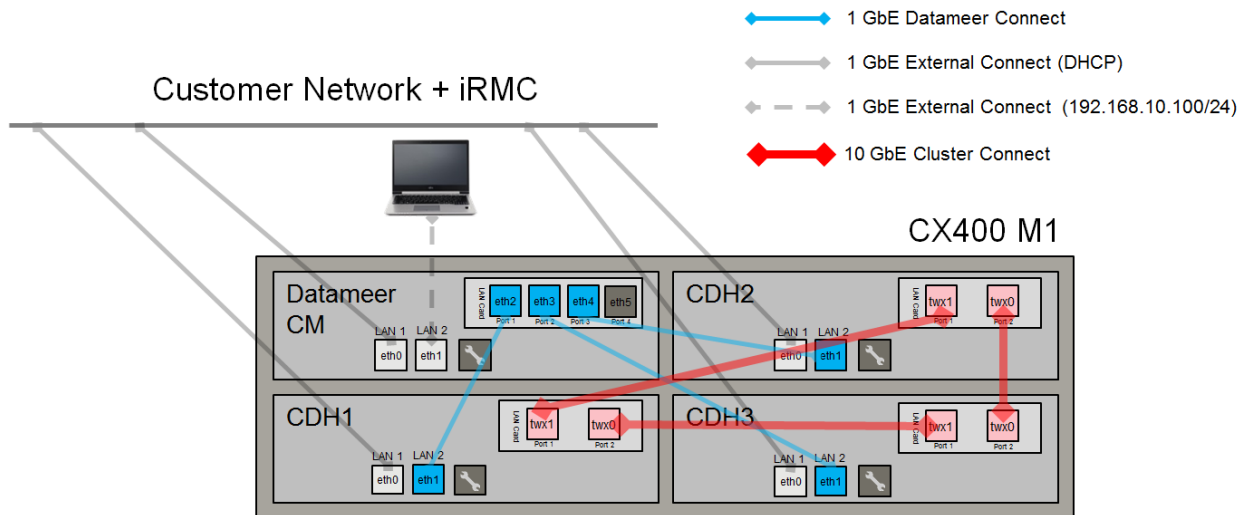
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Introduction

This document describes installation of PRIMEFLEX for Hadoop Entry in your datacenter. It consists of one CX400 unit containing 4 CX2550 M1 servers. Three of them are directly connected through 10GBE Twinax cables. These nodes contain the Cloudera CDH5 cluster. The fourth node (Datameer node) connects to the other nodes through 1GBE RJ45 patch cables and contains also the Cloudera Manager. Each node uses a shared iRMC port to connect to your network.

Cabling

After installing the CX400 in the rack, restore the cabling exactly as shown in the picture below:



IP settings

All four nodes are prepared to be connected to your network by DHCP through eth0. These addresses are not used internally by the cluster. If fixed addresses for each server shall be used, the MAC addresses of the four eth0 interfaces must be added to your DHCP service or, if no DHCP service is available in your network, the addresses must be configured in the file `/etc/sysconfig/network-scripts/ifcfg-eth0` on all four nodes. eth1 on the Datameer node is configured with the static IP address `192.168.10.100/24`. This port can be used to connect to the system by a directly attached LAN cable and ssh, e.g. use PuTTY on a directly connected notebook. The root password of all nodes is `"pf4hpf4h"`. They can be reached from the Datameer node with ssh. The hostnames of the cluster nodes are `cdh1`, `cdh2` and `cdh3`.

Example for `/etc/sysconfig/network-scripts/ifcfg-eth0` with static IP address:

```
DEVICE=eth0
ONBOOT=yes
HWADDR=C4:54:44:80:08:A0
TYPE=Ethernet
BOOTPROTO=none
IPADDR=10.172.239.128
NETMASK=255.255.255.0
```

After changing the address, reboot the server.

To view the IP address of the iRMC assigned by DHCP, use the command

```
[root@datameer ~]# ipmitool lan print
```

on each node. To assign a static IP address, netmask and default gateway to the iRMC use the commands

```
[root@datameer ~]# ipmitool lan set 2 ipsrc static
[root@datameer ~]# ipmitool lan set 2 ipaddr <IP address>
[root@datameer ~]# ipmitool lan set 2 netmask <Netmask>
[root@datameer ~]# ipmitool lan set 2 defgw ipaddr <IP address of default gateway>
```

DNS

The entry configuration contains a local DNS for the CDH nodes on the Datameer node. To support name resolution in your network, add a forwarding server in the file `/etc/named.conf` on the Datameer node (replace address with address of customer's name server):

```
options {
    listen-on port 53 { 192.168.200.100; };
    listen-on-v6 port 53 { ::1; };
    directory      "/var/named";
    dump-file      "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    forwarders { 172.17.71.247; };
forward-only;
recursion-no;
};
```

After changing the configuration restart named with

```
[root@datameer ~]# service named restart
```

HTTP Proxy

For data import from the internet a proxy server is normally used. This proxy must be configured in Datameer in the file `/home/datameer/Datameer-*--mr2/conf/das-common.properties`:

```
## proxy settings to be used for http/https outgoing connections for webservice import jobs etc.
## das.network.proxy.type can be HTTP or SOCKS

das.network.proxy.type=HTTP
das.network.proxy.host=proxy.abg.fsc.net
das.network.proxy.port=81

## to exclude hosts from connecting to through the configured proxy
## you can specify a blacklist of hosts, ips & masks (with * acting as a wild card)
das.network.proxy.blacklist=localhost|127.0.0.1|192.168.*.*|*.pf4h.local|cdh1|cdh2|cdh3|datameer

## for proxies requiring authentication, set the username & password
#das.network.proxy.username=
#das.network.proxy.password=
```

Set username and password only if required by your corporate proxy. After changing the parameters restart the Datameer conductor with the command

```
[root@datameer ~]# service datameer restart
```

Migrating Datameer to MySQL

The preinstalled Datameer software is currently configured to use a local HSQL database. For production usage Datameer recommends the usage of a MySQL database instead. The description for configuration of a MySQL database within Datameer can be found here:

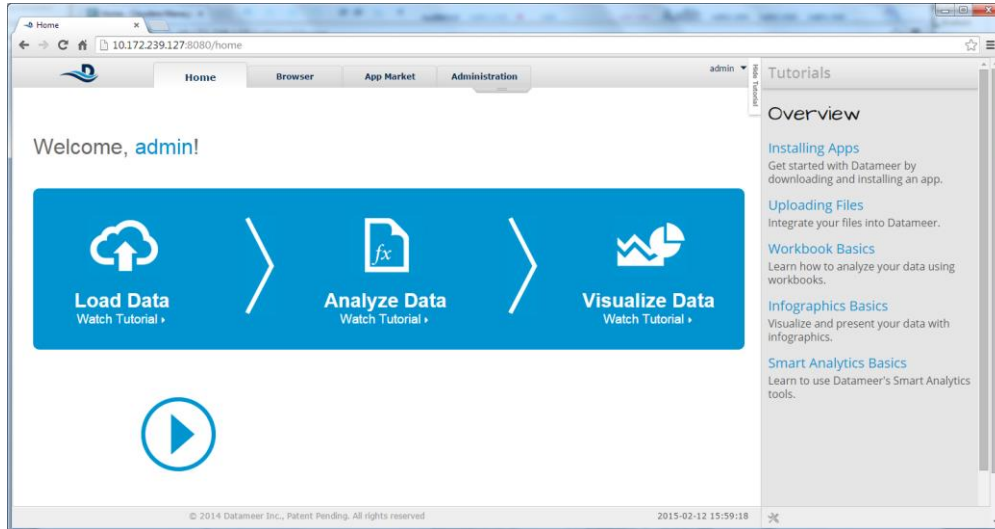
[http://www.datameer.com/documentation/display/DAS50/Installation+Guide#InstallationGuide-SettingupaMySQLDatabase\(Optional\)](http://www.datameer.com/documentation/display/DAS50/Installation+Guide#InstallationGuide-SettingupaMySQLDatabase(Optional))

Access to Datameer

Use your browser to connect to the URL

`http://<IP of Datameer node>:8080`

Logon with user "admin" and password "admin". Change the default password after first logon.

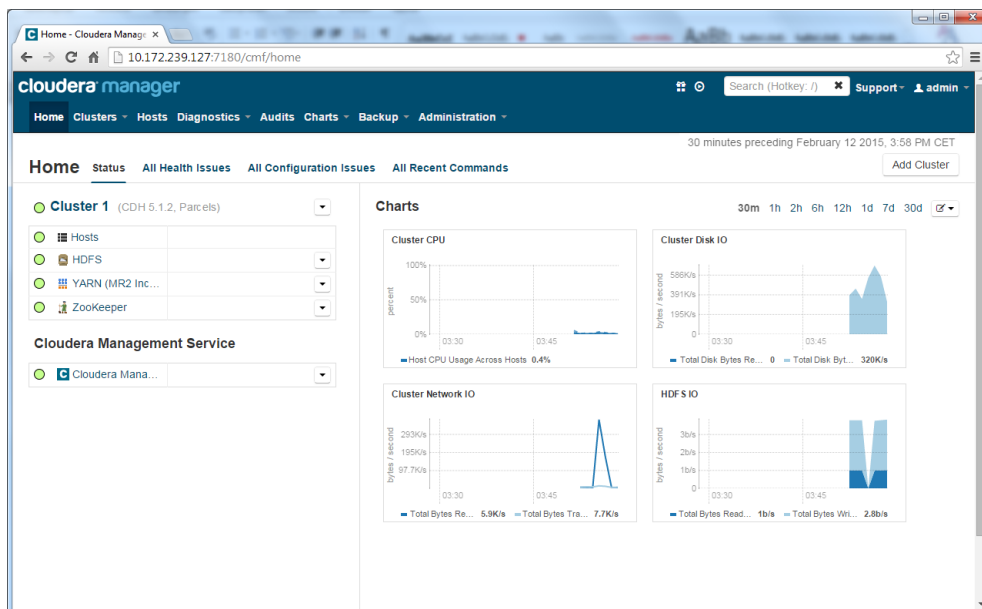


Access to Cloudera Manager

Use your browser to connect to the URL

`http://<IP of Datameer node>:7180`

Logon with user "admin" and password "admin". Change the default password after first logon.



Contact

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