

IBM Power Cloud Management Console

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Licensing and Ordering Questions on CMC (5765-CMT) offering

- How is Cloud Management Console (CMC) licensed?

Cloud Management Console (5765-CMT) offering can be purchased as 'Monthly Term' based subscription.

- Charge Metric – “per socket basis”
 - For Power Enterprise Pool 2.0 (PEP) scenario, CMC subscription is required for each managed server.

Licensing and Ordering Questions on CMC (5765-CMT) offering

- How many years of CMC subscription can be purchased?

CMC subscription is currently available in following 'Terms':

- 3 Month Term
- 6 Month Term
- 12 Month Term
- 36 Month Term
- 48 Month Term
- 60 Month Term

Licensing and Ordering Questions on CMC (5765-CMT) offering

- Is CMC entitlement included with other products?

A 12-month entitlement of CMC is included with following New IBM Power Enterprise Systems:

- New IBM Power E1050 (9043-MRX)
- New IBM Power E1080 (9080-HEX)

A 36-month entitlement of CMC is included with -

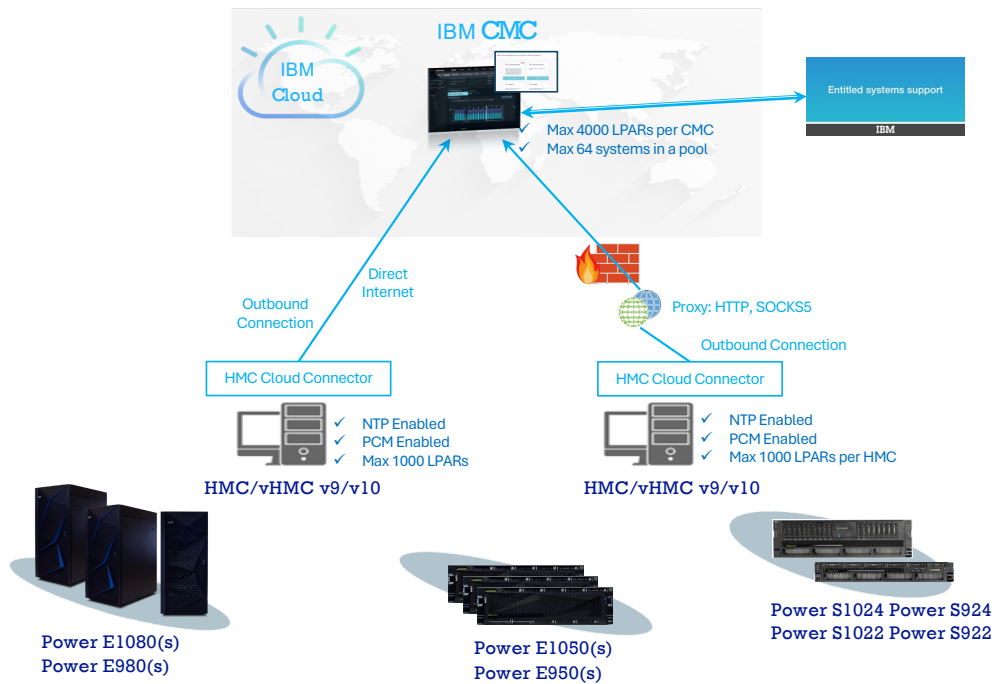
- IBM Power Systems Enterprise Cloud Edition (5765-ECB)
- IBM Power Systems Enterprise Cloud Edition with AIX 7.2/7.3 (5765-CBA)

Where Does the CMC Run?

- Dallas
- Frankfurt
- Germany
- London
- Sydney
- Tokyo
- Sao Paulo

Power Private Cloud with Shared Utility Capacity

Detailed connection diagram



HMC CLOUD CONNECTOR: DETAILED STEPS

STEP 1: RETRIEVE CLOUD CONNECTOR KEY FROM CMC

The screenshot shows the 'Cloud Connector' configuration page in the CMC. The navigation bar includes 'Settings', 'Manage Users', 'Manage Resource Roles', 'Apps', 'Cloud Connector', 'API', and 'Public Cloud'. The 'Cloud Connector' tab is active. Below the navigation bar, there are tabs for 'Management' and 'Status'. The 'Data Filter' section explains that the Cloud Connector filters selected attributes from getting pushed to the Cloud Storage. A table lists two resource types: 'Managed System IP Address' and 'Virtual IO Server/Logical Partition IP Address', both with 'ENABLE/DISABLE' checkboxes. The 'Attribute Masking' section shows a 'Disabled' toggle and a link to 'CMC Attribute Masking documentation'. The 'Cloud Connector Startup Command' section includes a 'Copy to Clipboard' button and a note: 'Note: If you are using a proxy for cloud connector, please do not use this command as-is. See the man/help for proxy options you will need.' Below the note, a terminal command is shown, with a red box highlighting the key value: `chsvc -s cloudconn --start -k V9FR9M11U1FNDWZt cWEx03JQnZorTF lU01MaGVldzdVmh2WgdZE115Wj2U1L6emp FT2pmLXE2Z1JydkS1ZnRGYUJKUWZJvW5tU203c0xj ZU2qV LQyeG5maHcSSWdoT8FtSwIR1kyZmpxTF9rcXhaS3Z GRTRBth3y0uGic1g5R Lj0aWhrAZ21RGNu08R0YKZv0nJ0Y0L0u0p0194RF3JicFZFZU19RXALTYnozTGpnaE45oznRX1FoVNMhcW28WJajZpxdMub thabG0XVzk1VWFu0GpL5J RUTjd0QXhnW2gtcDhw0B dmpLp8cLUvZwLLzZvZapKz0M0agz0W0308kxmf1eJ FR3J1z3RvcKcZ3Fy0nhG511stfFuLwhae VA2STZY00RSU21ent1Z81WZFTERB0nJ1ct0ydl5w63elc0n1ty5j3z8`. The key value is `V9FR9M11U1FNDWZt cWEx03JQnZorTF lU01MaGVldzdVmh2WgdZE115Wj2U1L6emp FT2pmLXE2Z1JydkS1ZnRGYUJKUWZJvW5tU203c0xj ZU2qV LQyeG5maHcSSWdoT8FtSwIR1kyZmpxTF9rcXhaS3Z GRTRBth3y0uGic1g5R Lj0aWhrAZ21RGNu08R0YKZv0nJ0Y0L0u0p0194RF3JicFZFZU19RXALTYnozTGpnaE45oznRX1FoVNMhcW28WJajZpxdMub thabG0XVzk1VWFu0GpL5J RUTjd0QXhnW2gtcDhw0B dmpLp8cLUvZwLLzZvZapKz0M0agz0W0308kxmf1eJ FR3J1z3RvcKcZ3Fy0nhG511stfFuLwhae VA2STZY00RSU21ent1Z81WZFTERB0nJ1ct0ydl5w63elc0n1ty5j3z8`.

HMC CLOUD CONNECTOR: DETAILED STEPS

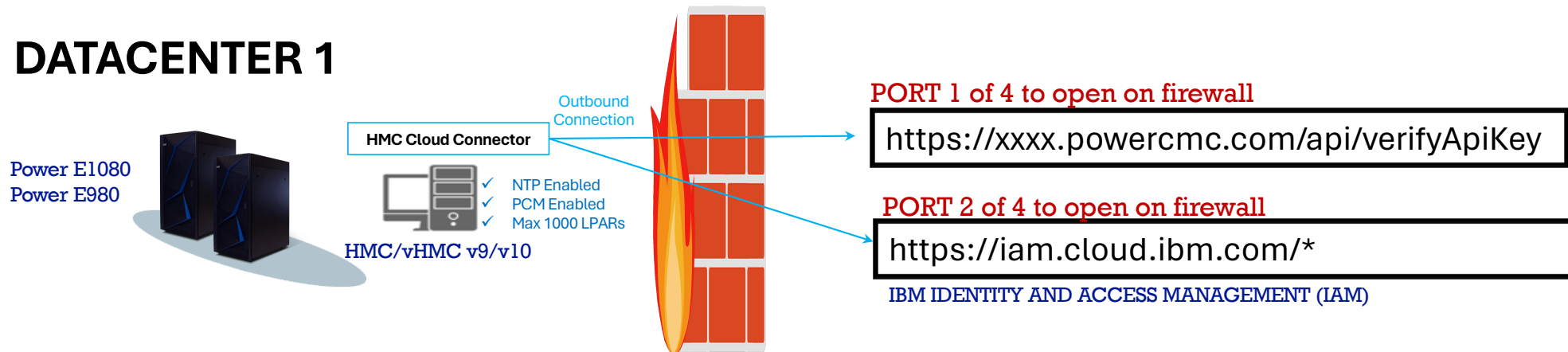
STEP 2: START CLOUD CONNECTOR SERVICE ON HMC

```
hscroot@rsihmc1[REDACTED].com:~> chsvc -s cloudconn -o start -k VF9BNW11U1FNOWZtcWExQ3JQNmZoRTFLU01MaGVidzdDVmh2NWdDZE  
1lSWJzUUl6empfT2pmLXE2Z1Jydk5IZnRGYUJKUWZJVW5tU203c0xjZUZqVlQyeG5maHc5SWdoT0FtSWhIR1kyZmpxTF9rcXhaS3ZaTVlmUWxNc1NpR  
WNOZ3BGRTRBTnIyOUdIc1g5RlJoaWhrX21zRGNUQ0R0YXZvQnJGY0l0bHpxQ194RFJHcFZFZU1XRXLTYnozTGpnaE45dzNRX1FoVWNMcWZ0NXJqY2px  
dmNublhabG9XVzk1VHFuOGpiSjRUTjdDQXhnN2gtcDhwdDBnNWtpbzY0LTR0d1V5Tl dmMlpBcUJvZUNiLXZwZmpHX2xHM2g2dWx3ODRxVmFLejF6T3J  
hZ3RvcXczZ3FybnhGSllsTmFuLWhaelA2STZYODRSU2lmYlZBTWZFTERB0nJlchNydi [REDACTED]
```


HMC CLOUD CONNECTOR: DETAILED STEPS

STEP 3: CLOUD CONNECTOR CONNECTS TO PORTAL THEN IAM (OUTBOUND TLS, PORT 443)

DATACENTER 1

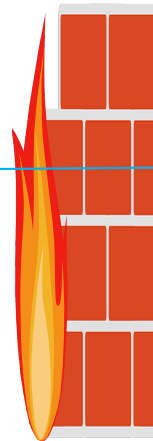
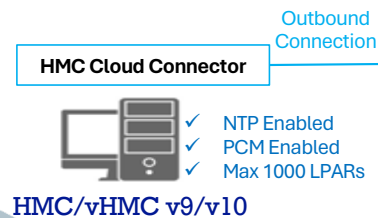


HMC CLOUD CONNECTOR: DETAILED STEPS

STEP 4: CLOUD CONNECTOR CONNECTS TO CLOUDANT DB TO RETRIEVE CONFIGURATION DATA AND CERTIFICATES (OUTBOUND TLS, PORT 443)

DATACENTER 1

Power E1080
Power E980



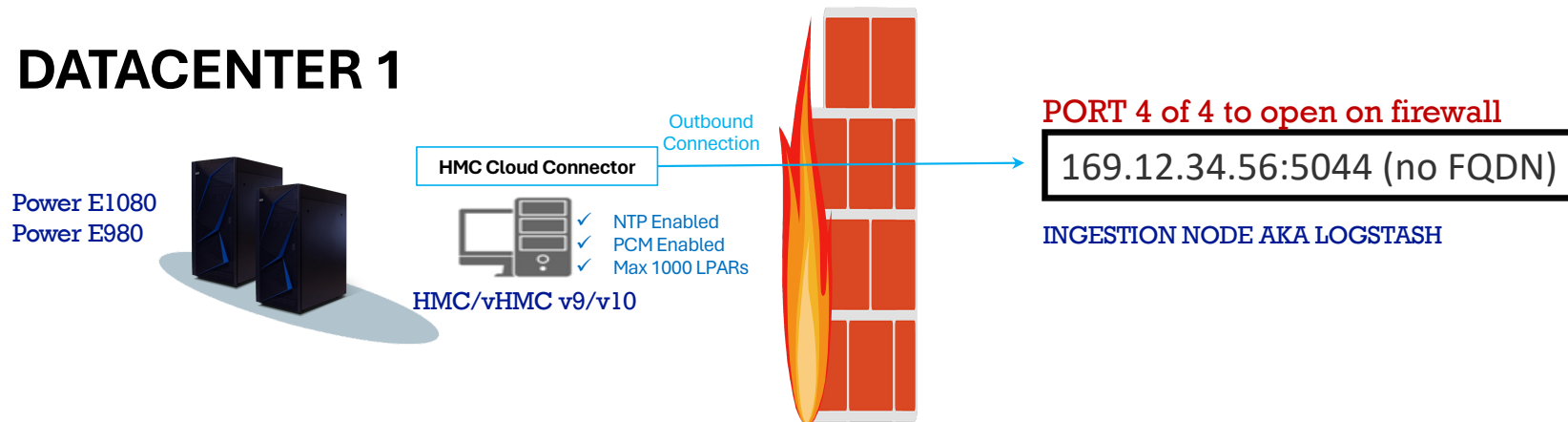
PORT 3 of 4 to open on firewall

<https://14ac5673-425b-425a-84ed-7db5baf5bc90-bluemix.cloudant.com/>*

HMC CLOUD CONNECTOR: DETAILED STEPS

STEP 5: CLOUD CONNECTOR CONNECTS TO LOGSTASH
(OUTBOUND TLS, PORT **5044**)

DATACENTER 1



HMC CLOUD CONNECTOR: EXAMPLE DATA

Inventory.json

```
{
  "ManagedSystem": [
    {
      "entry": {
        "content": {
          "ManagedSystem": {
            "SystemFirmware": {
              "content": "VM950_FW950.11 (75)"
            },
            "SystemType": {
              "content": "fsp"
            },
            "PowerSupplies": {
              "PowerSupply": [
                {
                  "FruNumber": {
                    "content": "02RA059"
                  },
                  "MemberId": {
                    "content": "1000"
                  },
                  "Description": {
                    "content": "Modular PowerSupply"
                  },
                  "SerialNumber": {
                    "content": "YL101312P132"
                  },
                  "Health": {
                    "content": "OK"
                  },
                  "State": {
                    "content": "Enabled"
                  }
                }
              ]
            }
          }
        }
      }
    }
  ]
}
```

performance.json

```
{
  "frequency": "60",
  "currentVirtualProcessors": 1,
  "numOfWrites": 5,
  "procMode": "uncap",
  "sysName": "Server-9040-MR9-SN82F18FX",
  "transmittedBytes": 402652,
  "sysMtms": "9040-MR9*82F18FX",
  "entitledProcUnits": 1,
  "id": 1,
  "state": "Running",
  "utilizedMem": 3912237056,
  "transferredBytes": 191780,
  "meteredUtilizedProcUnits": 0.02829,
  "numOfReads": 35,
  "utilizedProcUnits": 0.02829,
  "timeStamp": 1637778540,
  "sentPackets": 61,
  "sharedAdapters": [
    {
      "bridgedAdapters": [
        "ent4",
        "ent8",
        "ent8"
      ],
      "sentPackets": 237.033,
      "receivedBytes": 19170.833,
      "physicalLocation": "U9040.MR9.82F18FX-V1-C2-T1",
      "receivedPackets": 233.867,
      "id": "ent9",
      "type": "sea",
      "sentBytes": 23488.6
    }
  ],
}
```

POOLS 2.0 – ROLE OF HMC, CMC AND ESS

- HMC
 - PCM (Performance and Capacity Monitoring) collection
 - Ship metrics to CMC
 - Manage CoD codes
- CMC
 - Aggregate metrics to determine per-minute usage
 - Deduct against credit balance
 - Budget Management
 - Data visualization
 - Compliance
- ESS
 - Inventory (Base Capacity, Capacity Credits) Management

DEMO



Georgia IBM POWER Systems User Group



Date/Time: Thursday, April 18, 2024, 2pm to 5pm
Location: IBM Corporation, Building A, Barfield Auditorium
6303 Barfield Road NE, Atlanta, GA 30328

Agenda:
2:00-2:10pm Meet and Greet
2:10-2:15pm Opening Housekeeping
2:15-4:50pm Two Presentations

Subject: Cloud Management Console (CMC) Deep Dive
Presenter: Michael Quaranta
Senior Managing Consultant, Atomization and Optimization
IBM Technology Expert Labs

Subject: Capacity Planning Tool (CPT) for Shared Utility Capacity (PEP 2.0)
[CPT-MCM (Capacity Planning Tool – Metered Capacity Modeling)]
Presenter: Michael Quaranta
Senior Managing Consultant, Atomization and Optimization
IBM Technology Expert Labs

4:50-5:00pm Round Table
5:00pm Closing Housekeeping
5:00-7:00pm To be determined