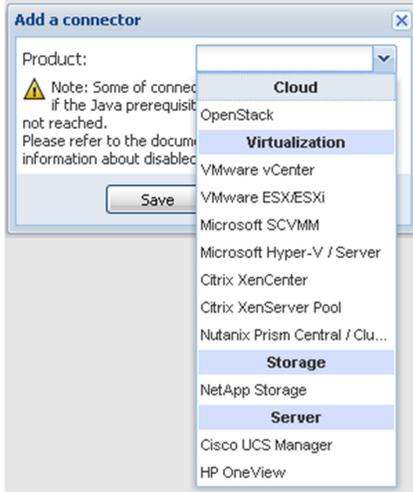


Adding a Microsoft Hyper-V/Server connector

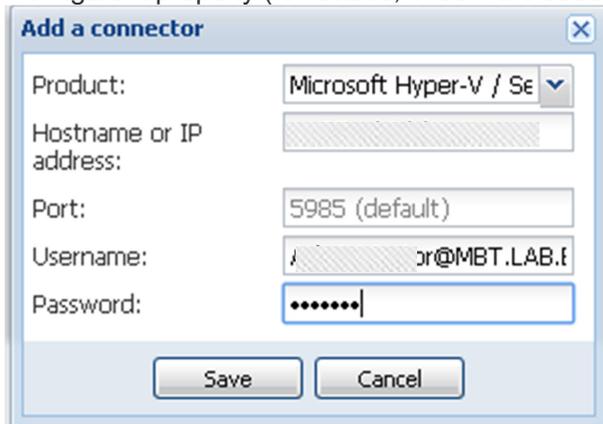
Create Microsoft connector

1. Select the Infrastructure connector and click on add



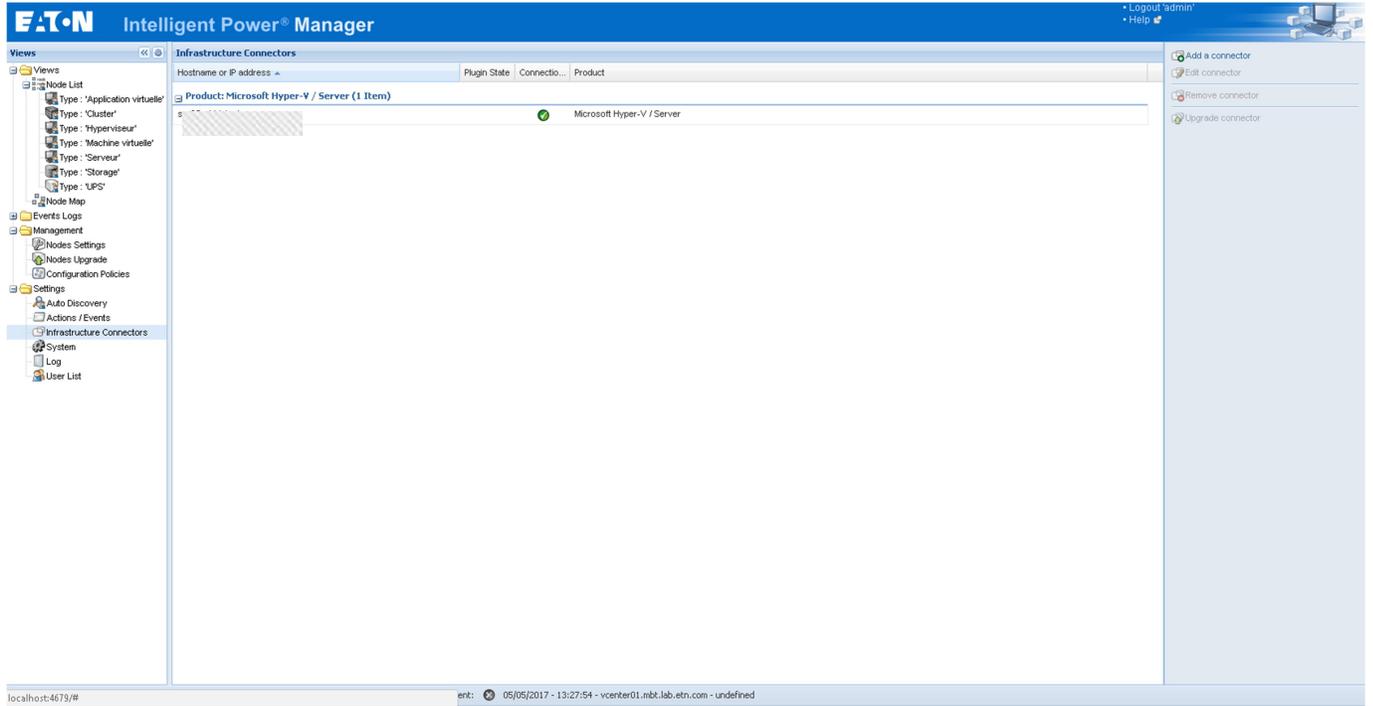
([figure Add Connector Microsoft Hyper-V 01](#))

2. Select Microsoft Hyper-V/Server
3. Configure it properly (for details, check the section [Configure Microsoft Server authentication](#))



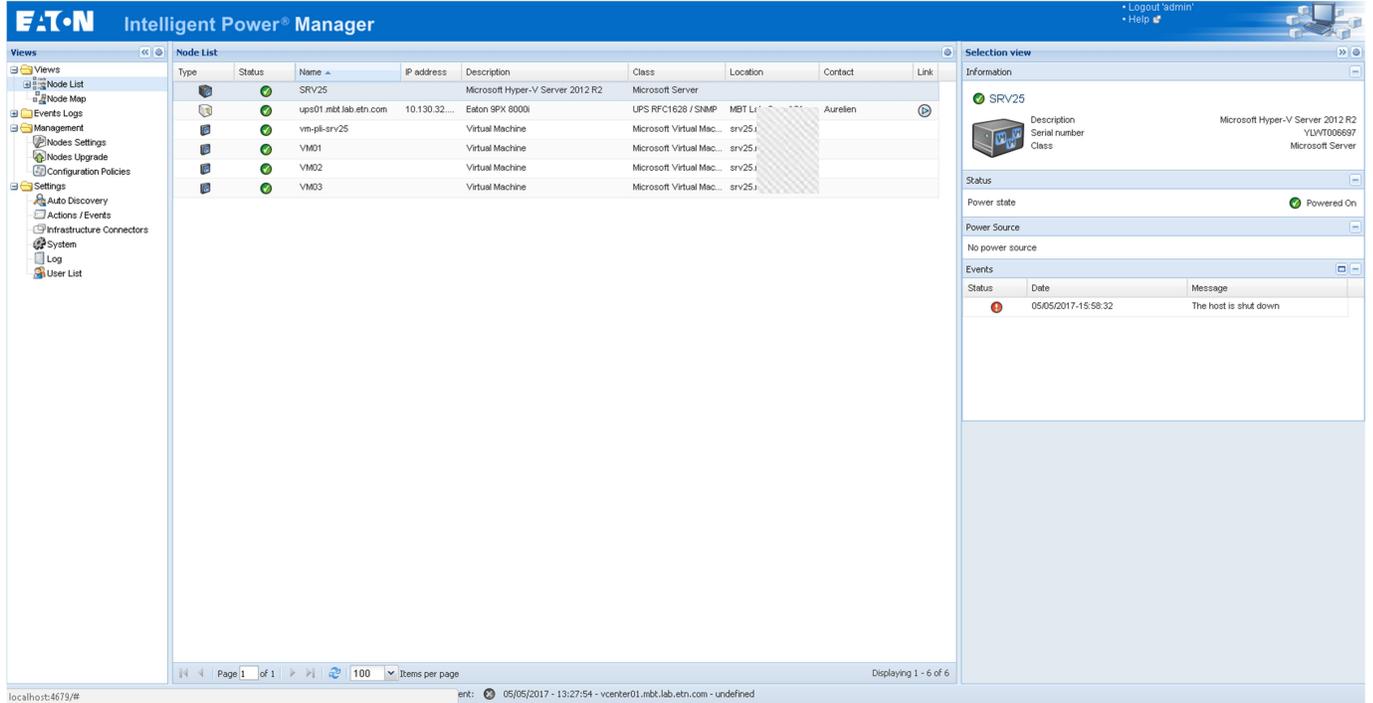
([figure AddConnector Microsoft Hyper-V 02](#))

4. Check that the communication is Ok



(figure AddConnector Microsoft Hyper-V 03)

Display Data



The screenshot displays the Eaton Intelligent Power Manager web interface. The main area shows a 'Node List' table with the following data:

Type	Status	Name	IP address	Description	Class	Location	Contact	Link
Microsoft Hyper-V Server 2012 R2	SRV25	Microsoft Hyper-V Server 2012 R2			Microsoft Server			
Eaton 9PX 8000i	ups01.mbt.lab.ethn.com	10.130.32...	Eaton 9PX 8000i	UPS RFC1626 / SNMP	MBT L...		Aurelien	
Virtual Machine	vm-pl-srv25	Virtual Machine			Microsoft Virtual Mac... srv25			
Virtual Machine	VM01	Virtual Machine			Microsoft Virtual Mac... srv25			
Virtual Machine	VM02	Virtual Machine			Microsoft Virtual Mac... srv25			
Virtual Machine	VM03	Virtual Machine			Microsoft Virtual Mac... srv25			

The 'Selection view' for SRV25 shows the following details:

- Information:** SRV25, Description: Microsoft Hyper-V Server 2012 R2, Serial number: VLV7006697, Class: Microsoft Server.
- Status:** Powered On.
- Power state:** Powered On.
- Power Source:** No power source.
- Events:** One event on 05/05/2017-15:58:32 with message 'The host is shut down'.

Page 1 of 1, 100 items per page, Displaying 1 - 6 of 6.

localhost:4679/# ent: 05/05/2017 - 13:27:54 - vcenter01.mbt.lab.ethn.com - undefined
[\(MSNodeList Hyper v 01\)](#)

Configure Microsoft server authentication

Server side

Configure prerequisites

IPM is able to connect on Microsoft server with two authentication configuration but need some prerequisites.

WinRM service need to be enable

```
winrm quickconfig
```

WinRM service AllowUnencrypted need to be "true"

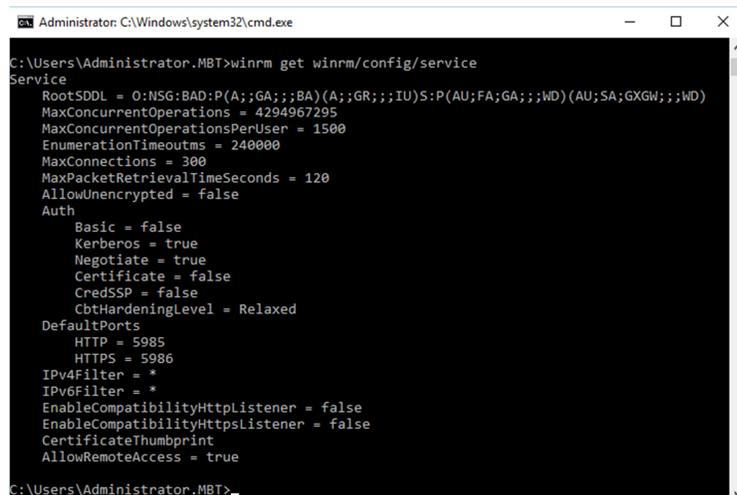
```
winrm set winrm/config/service @{AllowUnencrypted="true"}
```

Or remotely

```
winrm set winrm/config/service @{AllowUnencrypted="true"} -r:microsoftServer01
```

Kerberos Authentication

This is the default configuration, it should be no need to modify it.



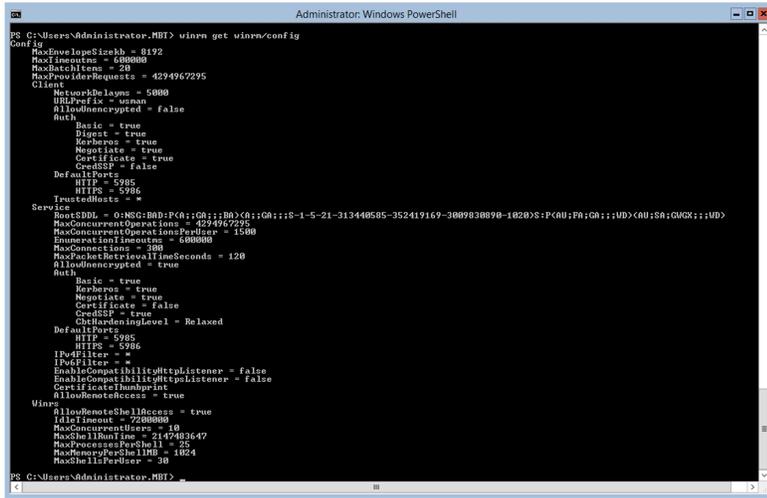
```
Administrator: C:\Windows\system32\cmd.exe
C:\Users\Administrator.MBT>winrm get winrm/config/service
Service
RootSDDL = O:NSG:BAD:P(A;;GA;;;BA)(A;;GR;;;IU)S:P(AU;FA;GA;;;WD)(AU;SA;GXGW;;;WD)
MaxConcurrentOperations = 4294967295
MaxConcurrentOperationsPerUser = 1500
EnumerationsTimeouts = 240000
MaxConnections = 300
MaxPacketRetrievalTimeSeconds = 120
AllowUnencrypted = false
Auth
  Basic = false
  Kerberos = true
  Negotiate = true
  Certificate = false
  CredSSP = false
  CbtHardeningLevel = Relaxed
DefaultPorts
  HTTP = 5985
  HTTPS = 5986
IPv4Filter = *
IPv6Filter = *
EnableCompatibilityHttpListener = false
EnableCompatibilityHttpsListener = false
CertificateThumbprint
AllowRemoteAccess = true
C:\Users\Administrator.MBT>
```

([figure AuthConf01](#))

Basic Authentication

To allow the basic authentication you need to change the "auth" parameters:

```
winrm set winrm/config/service/auth @{Basic="true"}
```



```
PS C:\Users\Administrator.MBT> winrm get winrm/config
Config
MaxEnvelopeSizekb = 8192
MaxTimeouts = 600000
MaxBatchItems = 20
MaxProxiesPerRequest = 4294967295
Client
  NegotiateLayers = 5000
  URLPrefix = /wsman
  AllowInsecure = false
  Auth
    Basic = true
    Digest = true
    MemberOf = true
    Negotiate = true
    Certificate = true
    CredSSP = false
  DefaultPorts
    HTTP = 5985
    HTTPS = 5986
  TrustedHosts = *
Service
  RootSDDL = O:NSG:BAD:P(;;CA)::G;;G||BA((A;G))::S-1-5-21-313440595-352419169-3009030090-1020\S-P(;;CA);PA;G||;UD\AU;SO;GNGX;;;UD
  MaxConcurrentOperations = 4294967295
  MaxConcurrentOperationsPerUser = 4500
  EnumerationTimeouts = 600000
  MaxConnections = 300
  MaxPacketRetrievalTimeSeconds = 120
  AllowInsecure = true
  Auth
    Basic = true
    Kerberos = true
    Negotiate = true
    Certificate = false
    CredSSP = true
    CtlHardeningLevel = Relaxed
  DefaultPorts
    HTTP = 5985
    HTTPS = 5986
  IPv4Filter = *
  IPv6Filter = *
  EnableCompatibilityHttpListener = false
  EnableCompatibilityHttpsListener = false
  CertificateThumbprint
  AllowRemoteAccess = true
Winrm
  AllowRemoteShellAccess = true
  LocalAccount = *
  MaxConcurrentUsers = 200000000
  MaxShellSessionTime = 2147483647
  MaxProcessesPerShell = 20
  MaxMemoryPerShellMB = 1024
  MaxShellPerUser = 30
```

(figure AuthConf02)

Client side (IPM hosted server)

Kerberos Authentication

Windows server

You need to configure the connector with the domain name like "Administrator@DOMAIN.COM"

The domain need to be in uppercase.

IPM should create a file named "krb5.conf" in "%%/IntelligentPowerManager/emc4j/etc/"

Virtual appliance

You need to modify the file "/etc/krb5.conf" as below

INFO : Domain name need to be in Uppercase

```
vi /etc/krb5.conf
```

```
[libdefaults]
    default_realm = DOMAIN.COM

[realms]
    DOMAIN.COM = {
        kdc = kerberos.DOMAIN.COM
        admin_server = kerberos.DOMAIN.COM
```

DOMAIN.COM is the Domain where the user is.

kerberos.DOMAIN.COM is the domain name of the Active Directory server

Server time

NOTE : Date need to be the same as the Kerberos server, check ntp services