

# Creating VMs for New Customer

01/05/2024 6:14 pm EST

**Purpose:** When the sale purchase is completed, the customer will start to receive their equipment and software. During this time, the Cloud VMs must be created and prepared for the customer to be tested and configured before going live. This guide will show you the proper steps and procedures to install all required applications and configurations.

## Requirements:

Updated Seed VM (Window's Updates/WebCerts/Cylance/Manitou Apps/etc.)  
Provided IP Addresses (MC = 10.1.10.XXX, CO = 10.1.11.XXX, LA = 10.2.10.XXX)  
Server License to be created and applied after VM creation  
Bold Distributer.exe on Customer ACTIVE PRIMARY VM (ex. MC-MAN-XXX)  
Password created for SQL DB Cloud, and acct\_??? on CRM

## Procedures:

-Log into the server (via mRemoteNG/RDP) where you will be applying the VM to through Hyper-V:

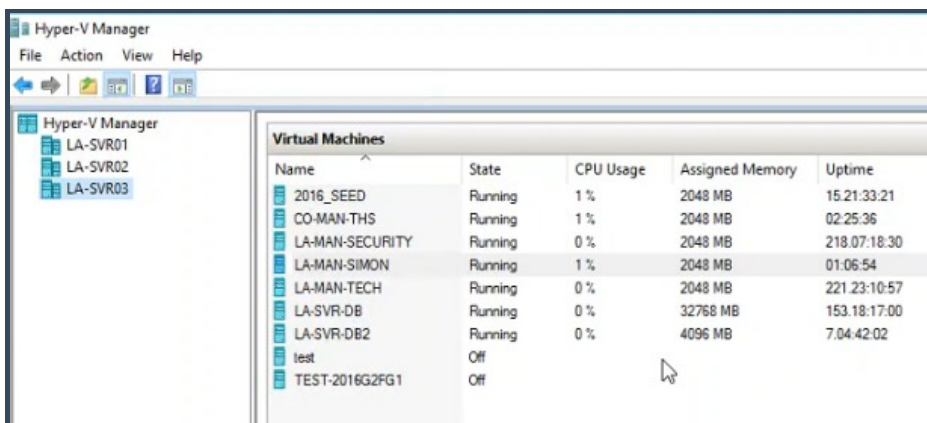
Ex: Log into the Host Machine as co.manitoucloud.com\Administrator through:

-MC = MC-SVR-01, MC-SVR-02, MC-SVR-03

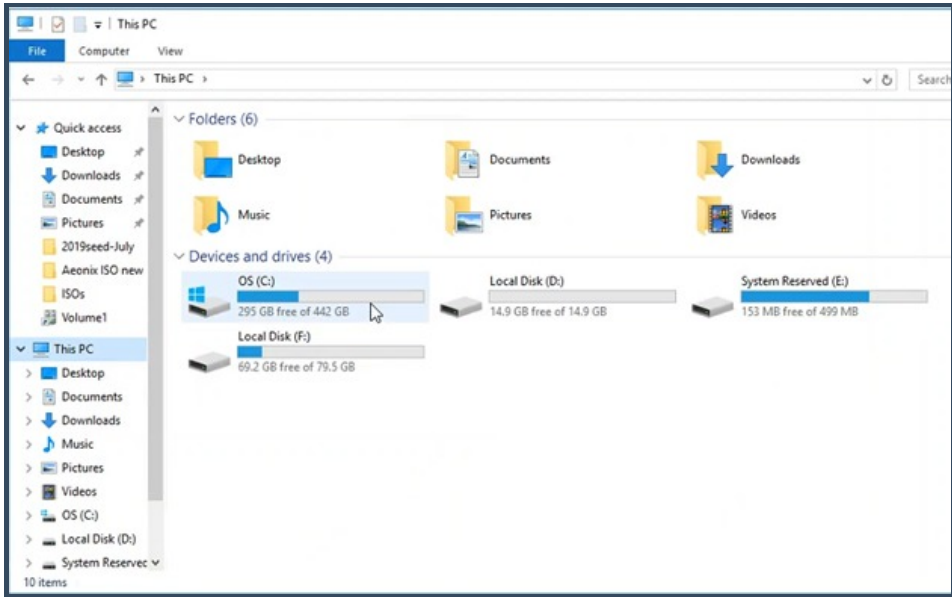
-CO = CO-SVR-DB01/DB02 > RDP to 10.1.10.44 to access CO VMs

-LA = MC-SVR-01/02/03 > RDP to 10.2.10.11 to access LA VMs

-Launch Hyper-V Manager on the selected server machine (MC/CO/LA) and you'll be brought up with a list of the servers with a selection of VM applied.



-Next, in order to create the VM properly when using SEED VHDs, you'll need a folder applied to the correct directory with the rest of the VMs along with its .vhd (Virtual Hard Disk) to be placed in that folder in order to have that VM load in its correct path for consistency. So now you will need to open File Explorer > This PC > and select the location where all the VMs reside on the server.



\*\*\*NOTE\*\*\*

-These VM locations are as follows:

-MC = File Explorer >

-CO = File Explorer > This PC > OS (C:) > Customer VHD

-LA = File Explorer > This PC > OS (C:) > ClusterStorage > Volume1

-Now you will need to create a "new folder" and rename it to the customer you are creating.

EX. MC-MAN-SIMON / CO-MAN-SIMON / LA-MAN-SIMON

-Once the empty folder is created, go into the 20XXseed folder and you will see a .VHD file within the folder where you will copy and paste to the newly created folder and rename it.

EX. MC-MAN-SIMONvhd < \*this is the 20XXseed file renamed



-Now the .VHD and folder is created, Hyper-V Manager will now be able to go right into creating the new VM of the customer without fully loading the Windows OS and Manitou applications.

-In Hyper-V Manager, Select the Server where the VM will be set in, the Actions field will be updated to where the VM will be created. Select New under Actions in the right column, select Virtual Machine...

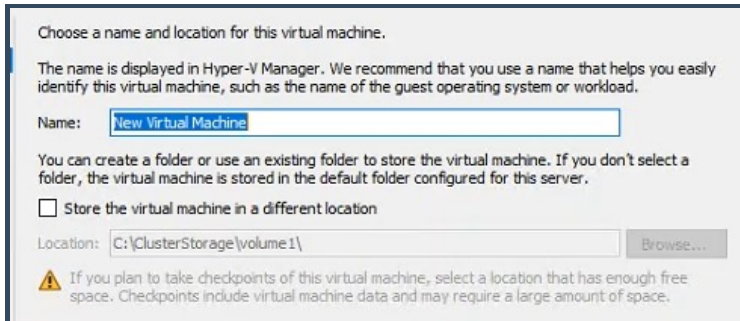


-You'll be brought to a new popup window called New Virtual Machine Wizard, click "Next >".

-Now you are brought to a new page, Specify Name and Location

-In the “Name” field, type the full name of the VM EX: MC-MAN-SIMON

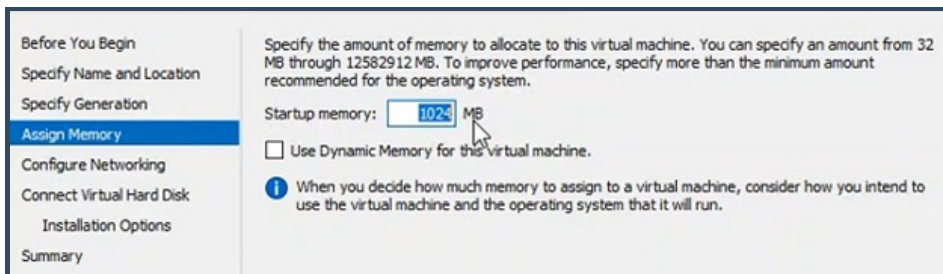
-Next checkbox the “Store the virtual machine in a different location” and Browse... should be selectable, select Browse...



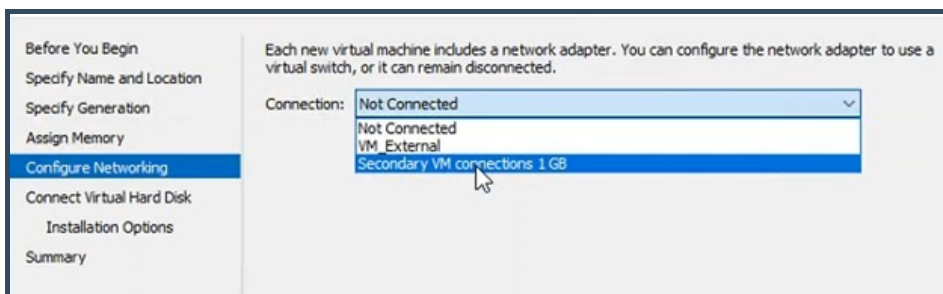
-Select the location of the new folder you created and renamed, as the VM will store all information in that location then click “Next >”. EX:

-In the Specify Generation page, Select Generation 1, Click “Next >”

-In the Assign Memory page, type the amount of memory the VM requires provided by your administrator. DON'T Checkbox the “Use Dynamic Memory for this virtual machine. Click “Next >”

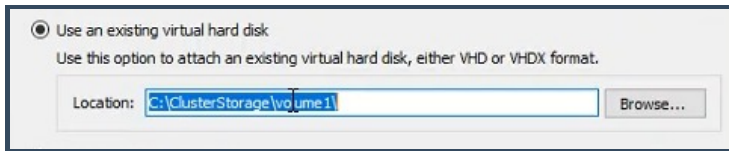


-In the Configure Networking page, use the dropdown in Connections, and select the proper connection for that VM. **\*\*NOTE\*\*** MC/CO/LA have different network virtual adapters, ask your administrator the appropriate connection to be selected. Once selected, click “Next >”



-In the Connect Virtual Hard Disk page, click on the bubble, “Use an existing virtual hard disk”, and under location, go to the .vhd file that you copied and pasted to your newly created folder, click “Next >”.

EX: C:\ClusterStorage\volume1\MC-MAN-SIMON\MC-MAN-SIMON\vhd.vhdx



-In the Summary page, review all changes and paths that you will be applying for the VM, and click “Finish”, your VM is now created in the Virtual Machine field in the middle of Hyper-V Manager.

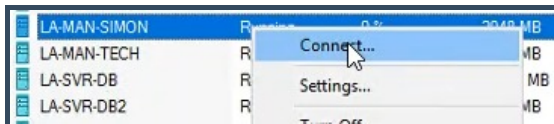
Name	State	CPU Usage	Assigned Memory	Uptime	Status	Configurati...
2016_SEED	Running	1%	2048 MB	15:21:35:53		8.0
CO-MAN-THS	Running	1%	2048 MB	02:28:08		8.0
LA-MAN-SECURITY	Running	0%	2048 MB	218.07.21.03		8.0
LA-MAN-SIMON	Running	0%	2048 MB	01:09:26		8.0

-Next you’ll need to set the proper VLAN for the newly created VM in order for the VM to communicate properly with the cloud. Right click the new VM, select “Settings” and a new window will pop up.

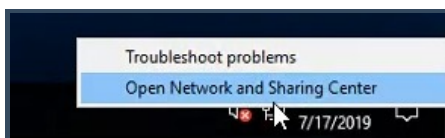
-Select the Network Adapter under the hardware column, and under the VLAN IP, enable the virtual LAN and type the number that MC/CO/LA is assigned to. EX: MC = VLAN 110, CO= NO VLAN, LA = VLAN 10

-Now, you’re ready to launch the new VM that you’ve created. Right click the VM and select “Connect...” and you’ll be brought to a popup window. Login with LOCAL credentials, (administrator) and password provided by your administrator, and login.

-You’ll be brought to the VM preloaded with Windows 10 and Manitou Applications installed with the seed .vhd you applied



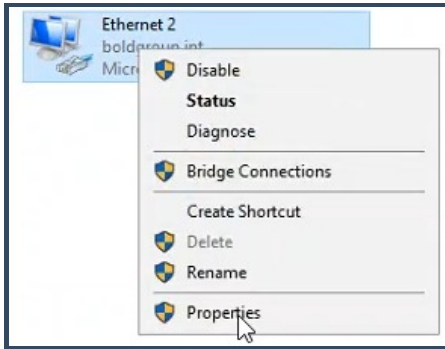
-Next, right click the network icon on the bottom right and select “Open Network and Sharing Center”



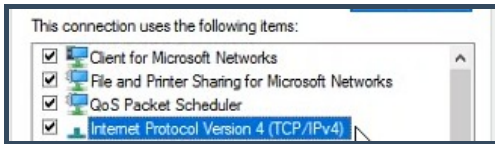
-The Network and Sharing Center window will pop up, click “Change adapter settings”



-Select the Network Connection (EX. Ethernet 2), right click and select “Properties”



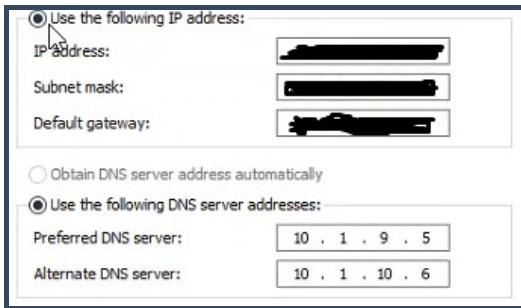
-Next, double click "Internet Protocol Version 4"



-Next, click the bubble "Use the following IP address:" and enter the IP fields provided by your administrator. After the IP address, Subnet mask, and Default gateway is entered in, also bubble "Use the following DNS server address:" and enter the following then select OK:

-Preferred DNS server: 10.1.9.5

-Alternate DNS server: 10.1.10.6



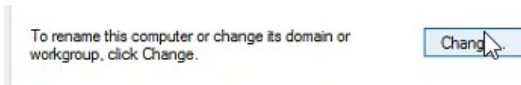
-Select "OK" and close all Network Connection windows

-Next, open the Server manager Icon on the bottom bar or type in search "Server Manager" you'll see the following icon:

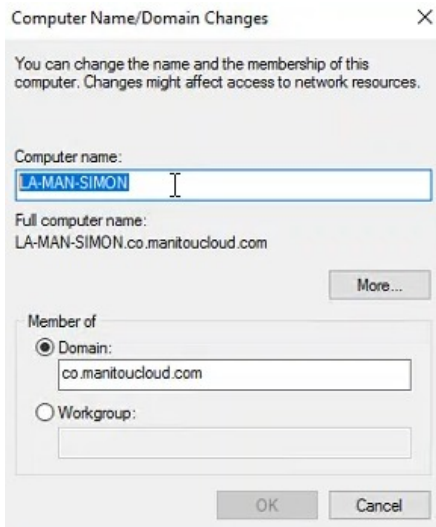
-Click on Local Server and in the middle field, you'll see Computer name, the name will show up as "CHANGEME", click on the name to change it's properties.



-The System Properties window will pop up, under the Computer Name tab, select "Change..."



- The following window will pop up and you'll need to change the Computer name from "CHANGEME" to the computer name given by your admin. EX: LA-MAN-SIMON



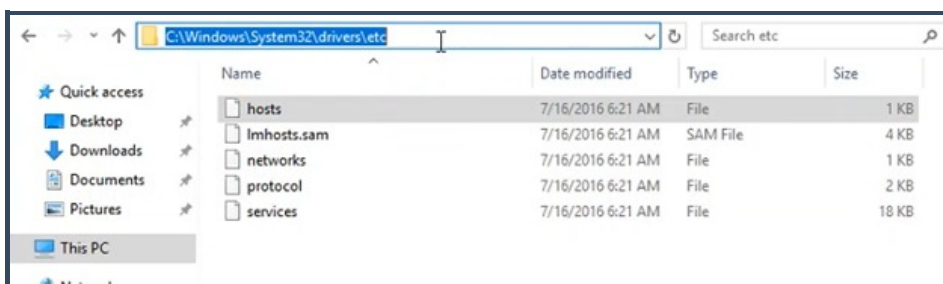
-Next, select the bubble “Domain:” and type:  
co.manitoucloud.com

-You will then be prompted to input the username and password of the domain, which you’ll be using the, co.manitoucloud.com\administrator, as the username and the password provided by your system administrator.

-Enter and the window will close and prompt you that you’ve successfully connected to the co.manitoucloud.com domain and will ask you to reboot.

\*\*\*\*DON’T REBOOT YET\*\*\*\*, since you could finish a few more fields that’s required for the LOCAL administrator to make changes to this field. Which is updating the HOST file and editing the registry file to prepare the server(s) to communicate with the Distributer application.

-Open File Explorer and navigate to:  
C:\Windows\System32\drivers\etc

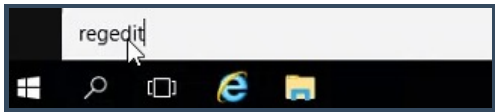


-You’ll see a file called, “hosts”, right click and open the file with Notepad.

-At the bottom of the text file, you will need to add the MAIN ACTIVE SERVER IN USE! Most likely a MC-MAN server, as it’s the primary and the Distributer Commander will be setup with this server, this would be same across all VMs (MC/CO/LA) on all host files on the servers. This helps for communication with the ACTIVE-IN-USE server. Once it’s been added, SAVE and close the host file. \*Notice\* you MUST Tab over to be in the correct column.

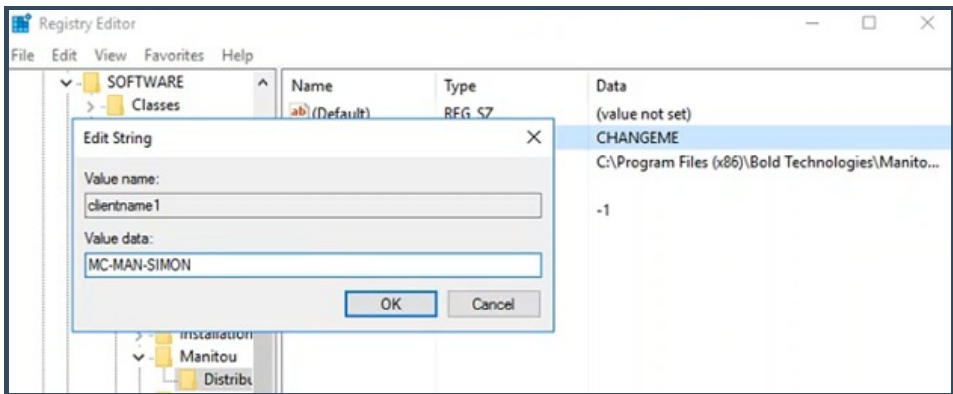
```
# localhost name resolution is handled within DNS itself.
# 127.0.0.1 localhost
# ::1 localhost
# 10.1.10.233 MC-MAN-SIMON
```

-Next, you'll have to go into "regedit" to make a change to the registry. (Since upon install, CHANGEME was still applied due to the seed .vhd and changes have to be made). In the windows search bar, type "regedit" and open and navigate to:



HKEY\_LOCAL\_MACHINE > SOFTWARE > WOW6432Node > Bold Technologies > Manitou > Distributer

\*double click "clientname1" in the window field\*



-Change the "Value Data" to the MAIN ACTIVE server that the customers will be using (Primary Server) and then select "OK"

-Now you can reboot the server, so the VMs can connect to the Cloud network with the changes made to the network ip, domain name, and host name.

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\*\*\*\*\*APPLY EVERYTHING ABOVE TO ALL VMs (MC/CO/LA) BEFORE CONTINUING\*\*\*\*\*

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-Once all three, MC/CO/LA, server VMs are updated with the above instructions, we can now configure them to communicate properly through the Distributer Commander application.

-Open the MC-MAN-???? VM that you've created and login as administrator under the co.manitoucloud.com domain:

- co.manitoucloud.com\administrator

-Once in MC-MAN-????, you'll need to install the Distributer Client on the MAIN ACTIVE PRIMARY server

\*\*\*\*\*This is only applied to ONE server at a time\*\*\*\*\*

-Open Command Line as an Administrator and type in Admin Credentials and enter.

-Type the following and press Enter\*Using TAB will fill in characters faster\*:

```
C:\Program Files (x86)\Bold Technologies\Manitou>cd "C:\Program Files (x86)\Bold Technologies\Manitou"
```

cd C:\ProgramFiles (x86)\Bold Technologies\Manitou

-Type the below:

```
C:\Program Files (x86)\Bold Technologies\Manitou>Distributer.exe -install
```

Distributer.exe -install

-Open Services in the search box on the Windows Start Icon

-You'll notice in the Services window, a new service has been applied and needs to be running. Right click Bold Distributer on Services and ensure it's running. This will show the MC/CO/LA VMs on the Distributer Commander if configured on their own servers via Regedit and Host file.



Name	Path	Status	Start Type	Location
Bold Application Server	Manitou Ap...	Stopped	Manual	Loc
Bold Auto Client	Manitou Au...	Stopped	Manual	Loc
Bold Broker	Manitou Br...	Stopped	Manual	Loc
<b>Bold Distributer</b>	Manitou Dis...	Running	Manual	Loc
Bold Distributer Client	Manitou Dis...	Running	Automatic	Loc
Bold Logger	Manitou Lo...	Stopped	Manual	Loc
Bold Marshaller	Manitou M...	Stopped	Manual	Loc
Bold Monitor	Manitou M...	Stopped	Manual	Loc

-Now that the Bold Distributer is installed on the Primary active server, you'll need to go to both CO-MAN-???? and LA-MAN-???? to restart the Bold Distributer Client in Services on those machines to have it Sync'd with MC-MAN-???? server.

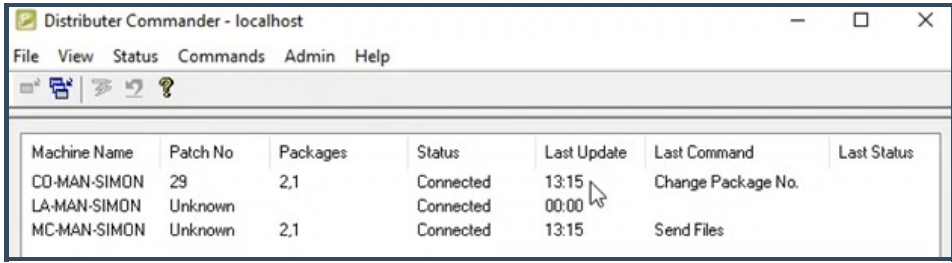


Name	Path	Status	Start Type	Location
Bold Distributer Client	Manitou Dis...	Running	Automatic	Loc

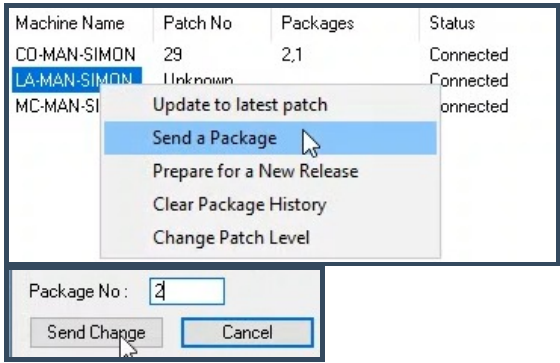
Once restarted on both CO and LA, go to the MC server and open the Distributer Commander.



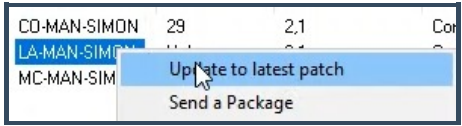
-Once opened, the machines would popup in Distributer Commander, and you would patch packages 2,1 by right clicking the server and apply the packages.



-To apply a package, right click the server and select "Send a Package". Send Package numbers, "2" and "1" on all servers.



-Once packages are applied, update the patch by right clicking "Update to latest patch"

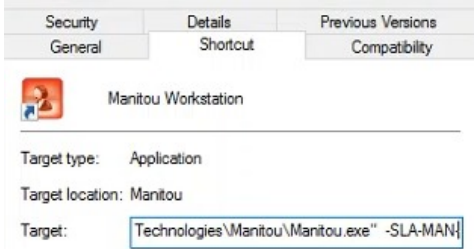


-Once completed, the Distributer Commander is now setup for the customer on the Primary (MC-MAN)

-Next, the Manitou Workstation and Supervisor Workstation needs the Target path edited to point to the VMs server and secondary servers. Due to the seed .vhd you used, the target path is looking for the PLACEHOLDER, not the MC/CO/LA host machines. So these input corrections must be made.

-Open both properties on Manitou Workstation and Supervisor Workstation on one of the three VMs (MC/CO/LA) by right clicking the icon and select "Properties" and look at the target path in the Shortcut tab.

-At the end of the target quotes, you'll see:  
-SPLACEHOLDER

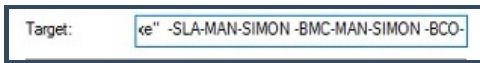


-The -S in the field is a target modifier to let it know what the primary server is on the current machine and would chose that at launch, meaning MC should start as -SMC-MAN-????, CO as -SCO-MAN-????, and LA as -SLA-MAN-????.

-After that is enters, the remaining 2 servers will be added with a -B as the backup connection for failover preparation, these

would follow as -BMC-MAN-????, -BCO-MAN-????, and -BLA-MAN-????

-This is what the following should be setup with on BOTH Manitou Workstation and Supervisor Workstation on all three VMs after the quotation target field:



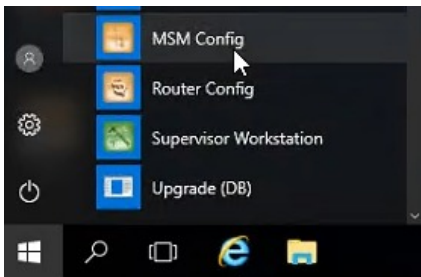
-MC server = -SMC-MAN-???? -BCO-MAN-???? -BLA-MAN-????

-CO server = -SCO-MAN-???? -BMC-MAN-???? -BLA-MAN-????

-LA server = -SLA-MAN-???? -BMC-MAN-???? -BCO-MAN-????

-Once this is all completed on all VMs, you can prepare the MSM Config to be setup with MC/CO/LA, so when the customer is ready for the next step in creating/transferring the Database to MSSQL, the configs will be prepared within the server.

-On the first VM to be configured, click on the Start button, open the "Bold Technologies" folder, and navigate to "MSM Config" and open it.



-In the MSM Config window, select the "Add" button and you'll be naming the MSSQL server's database rather than the VM host.

EX: MC-SVR-DB01, CO-SVR-DB02, LA-SVR-DB

-Once created, you'll need to edit it's configuration, the following will be entered as an example:



- Configuration Name: LA-SVR-DB
- Computer: LA-SVR-DB
- Database Service: MSSQLSERVER
- Backup Db Service: MSSQLSERVER
- Server Name: LA-SVR-DB
- Database Name: SIMON
- Database User: SIMON\_acct
- Database Password: \*\*\*\*\*

\*\*\*NOTE\*\*\* The SIMON\_acct password is provided by CRM, under Accounts > "customer name" > in the Servers field, Cloud SQL DB Account. If not created, use a 16 character password generator and apply it to the account for record and MSSQL future setups.

-Do this for ALL VMs, MC/CO/LA under both MCSupportAdmin and Administrator in the CO.Manitoucloud.com domain. VERY IMPORTANT, DO NOT apply the MSM Configs as a LOCAL Administrator, it WILL NOT communicate with MSSQL on the server.

-So remember to create the configs for both ??-SVR-DB01 and ??-SVR-DB02 as

co.manitoucloud.com\Administrator  
co.manitoucloud.com\MCSupportAdmin

\*\*Passwords are provided by the system administrator\*\*

-Once completed, your final steps are too:

- Install Cylance.exe (security monitor software) on ALL VMs
- Receive and Apply IIS certificate to server (expires ANNUAL) on ALL VMs
- Generate and Apply Server Licences to all VMs
- Send over backup database to be applied to MSSQL servers
- Set up replication and continue monitoring

\*\*\*The guides to apply this, are in separate documents provided by your system administrator\*\*\*

--This Completes the MC/CO/LA VM install, so each are named properly, have IPs, distributor setup, placeholders/changeme corrected, and msm configured.--