

Installation Guide for SaaS Uila Deployment

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Introduction

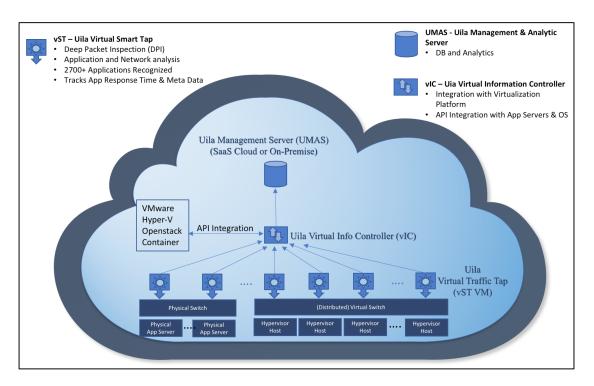
Scope and Purpose

This document describes the system requirements, installation and configuration steps for the Uila Virtual Information Controller(vIC) and Virtual Smart Tap(vST).

It is assumed that the reader has already installed Hyper-V and is familiar with the configurations and operations of Hyper-V.

Architecture Overview

The diagram below shows the Uila Management and Analytics System architecture (UMAS) and its relationship to Virtual Information Controller (vIC) and Uila Virtual Smart Taps (vST).



Virtual Architecture

The Uila Management and Analytics system(UMAS) is a big data store and analytics engine that is designed to monitor up to thousands of servers. The UMAS can record data in minute resolutions while maintaining real time responsiveness. The built-in redundancy offers high availability, removes downtime and reduces maintenance overhead.



The Virtual Information Controller (vIC) integrates to the Hyper-V. The vIC is deployed as a guest VM where it collects network, storage and compute performance metrics that are maintained by the Hyper-V. This is then combined with the data from the Virtual Smart Taps(vST) and transmitted to the UMAS.

Virtual Smart Taps (vST) are also deployed in the host as an efficiently designed small foot-print guest VM with embedded Deep Packet Inspection (DPI) technology to identify unique applications and their attributes. vST's measure application response time and collect network performance data. The vST does not examine or store the packets, thus eliminating the risk of exposing sensitive data.

Getting Started

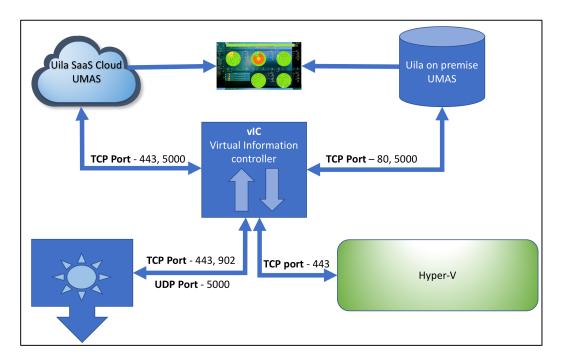
System Requirements

- Internet Browser for your monitoring console:
 - o Firefox, Chrome on Windows platform
 - o Safari, Firefox, Chrome on OS X platform
 - o Firefox, Chrome on CentOS, Ubuntu Linux platform
- Hyper-V version requirements:
 - Hyper-V version 6.3 or higher
- System Requirements -
 - Windows Server 2012 R2 Server
 - Optional Windows Server 2012 R2 Active Directory(AD) and Domain Controller(DC)
 - o Optional Windows Server 2012 R2 Cluster Failover
- Uila Virtual Smart Tap(vST) requirements:
 - Each of the hosts monitored requires one vST installed as a guest VM, with average single vCPU usage of 70 MHz, and Monitor Port Group average 200 kbps bandwidth, pre-allocated
 - o 1Gb memory required during installation and 500 Mb in run time
 - o 2Gb disk space required during installation and 500 Mb in run time
- Uila Virtual Information Controller (vIC) requirements:
 - Installed as a guest VM with single vCPU average usage of 275 MHz and Monitor
 Port Group average of 400 kbps network bandwidth
- vIC's minimum system requirement allocation is listed in Table below:



# of VM Monitored	vCPU	Virtual Memory	Local Storage
0 ~ 500 VM	2 Cores	4 GB	8 GB

- Proper Hyper-V access rights are required for vIC to collect information such as CPU, memory and storage metrics from Hyper-V. The access rights must be able to make configuration changes, deploy and setup Uila vST VM.
- Network requirement
 - Allocate one IP address for each of the vST's. This can be either static IP address or assigned via DHCP, prior to the deployment.
 - Allocate one static IP address for the vIC prior to deployment.
 - Open TCP and UDP ports to allow communications between Uila sub-systems as illustrated in the chart below.
 - Unblock TCP ports 5000 and 443 between vIC and the Uila site.
 - Unblock TCP ports 443 and 902 between vIC and Hypervisor hosts
 - Unblock UDP port 8000 between vIC and vST



User Registration

For Uila SaaS deployment, follow these steps to obtain your login ID and password.



- 1. Browse to Uila Web site www.uila.com
- 2. Click on "Free Trial" located on the top-right corner of the homepage



3. Click on "Get Instant Access"

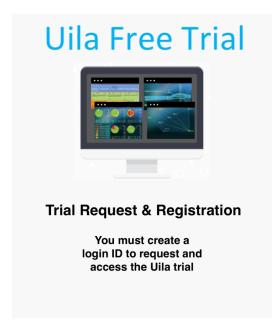


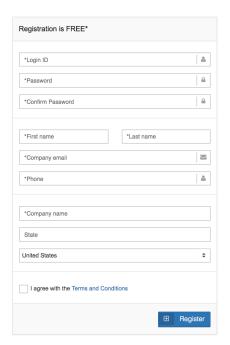
Fully Functional trial software (SaaS/Cloud deployment) from Uila allows IT staff to experience the power of its Application-Centric Data Center Infrastructure Monitoring & Analytics for 30 days.



4. Complete registration form and receive registration confirmation.







Registration completed!

Thanks for submitting your Uila free trial registration. An email has been sent to your email account. Please check your in-box.

5. Receive registration email with link for login to Uila portal

Hello customer,

Thank you for registering for the Uila product online.

Please click the below link to complete your registration and start the easy 3-step installation process:

Click here.

If you wish for our technical support team to complete the installation with you, simply respond to this email and we promise you a quick and painless installation experience.

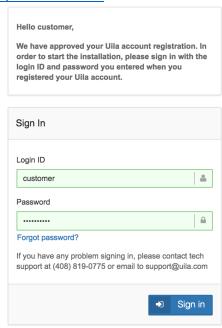
Thank you for your interest in the Uila solution.



Deploy Virtual Information Controller (vIC)

This section describes the step-by-step instruction to download, install and activate vIC.

1. Login to Uila Portal – www.portal.uila.com



- 2. An email with instructions to download vIC will be provided by a Uila Support staff. There will a zip file that consists of 3 files
 - O VIC-Deployment.ps1: Uila Hyper-V Powershell installation script.
 - o vic-template.vhdx: Uila Hyper-V vIC virtual machine template.
 - o uila-hyperv-vst.zip: Uila Hyper-V vST virtual machine template.
- 3. Open cmd as administrator and run the VIC-Deployment.ps1 installation script -

PowerShell.exe —ExecutionPolicy UnRestricted —File .\VIC-Deployment.ps1

```
Administrator: Windows PowerShell

PS C:\Uila-Hyper-V\uila-hyperv-vic-1.24-15> PowerShell.exe -ExecutionPolicy UnRestricted -File .\VIC-Deployment.ps1

Security warning
Run only scripts that you trust. While scripts from the internet can be useful, this script can potentially harm your computer. If you trust this script, use the Unblock-File cmdlet to allow the script to run without this warning message. Do you want to run C:\Uila-Hyper-V\uila-hyper-V\cila-15\VIC-Deployment.ps1?

[D] Do not run [R] Run once [S] Suspend [?] Help (default is "D"): R_
```

- 4. Enter vIC virtual machine configuration
 - o vIC name



- o vCPU
- Memory

```
Please enter vIC Virtual Machine Configuration. Press "ENTER" to accept default setting.

vIC Name (uila-vic):

vIC vCPU (2):

vIC Memory in GB (4 GB):
```

5. Select storage -

```
List of destination disk drive to deploy vIC on Hyper-V "HYPERV-03":
1. C: [LOCAL STORAGE] - Free Space: 655 GB.
2. D: [LOCAL STORAGE] - Free Space: 712 GB.
Select destination storage drive index to install vIC:: _
```

6. Select vSwitch for management communication –

```
List of destination disk drive to deploy vIC on Hyper-V "HYPERV-03":
1. C: [LOCAL STORAGE] - Free Space: 655 GB.
2. D: [LOCAL STORAGE] - Free Space: 712 GB.
Select destination storage drive index to install vIC:: _
```

7. Select vLAN option for vIC. If yes, a VLAN id must be specified.

Setup VLAN id for vIC Network Interface? [Y/N]:

8. Once vIC VM is deployed successfully, Hyper-V will open vIC console window for you to configure networking properties.



```
uila-vic on HYPERV-01 - Virtual Machine Connection
File Action Media Clipboard View Help
🕸 | 💿 📵 🧿 🔘 | 🔢 🕩 | 🗞 为 | 🐁
Setup Network Configuration for eth0
Setup DHCP for eth0 interface [y/n]? n
Enter the IP address: 192.168.0.215
Enter the subnet mask: 255.255.255.0
Enter the gateway: 192.168.0.1
Enter the DNS IP: 192.168.0.20
Setup Static Network Information:
      : 192.168.0.215
 Mask
       : 255.255.255.0
 GATEWAY: 192.168.0.1
 DNS : 192.168.0.20
Confirm? (y/n):y
Restarting the Network Service ...
```

9. Configure vIC properties here. Since this is a SaaS installation press 'y'.

```
Setup Uila Software Packages ...
Setup Uila software configuration ...
vIC using Uila Cloud Service? [y/n] y
Please enter the Login ID and password when registering on the Uila website.
Uila Login ID: uila-user
Uila Password: _
```

10. vIC reboots to apply the new configuration.

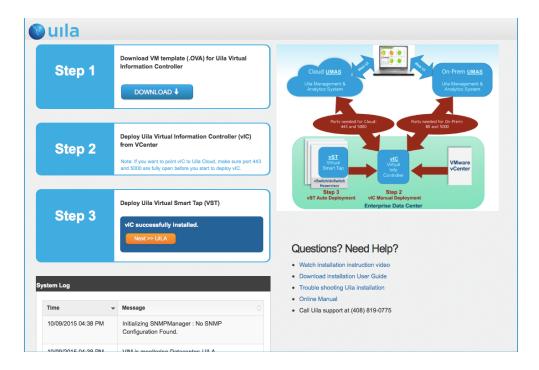
Now proceed to install the Virtual Smart Tap (vST)

Deploy Virtual Smart Tap (vST)

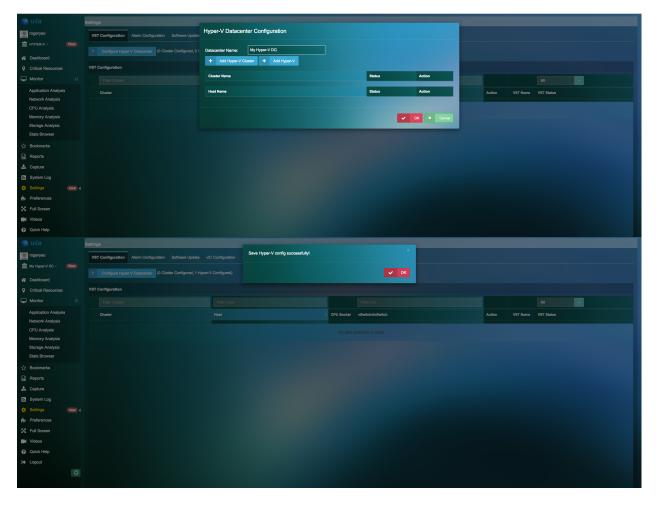
This section describes a step-by-step instruction to deploy vST.

- 1. Login to Uila portal (https://portal.uila.com/login).
- 2. If an orange button lights up, the vIC is able to communicate with the UMAS. Click on the orange button to start vST deployment.





3. Click on "Settings" and then "vST configuration" to define the Hyper-V datacenter





4. Once the Hyper-V and vSwitch on vST configuration appear, continue to install vST.



5. Once correctly installed, the vST status will show up with a green 'Active'

Contact Uila Support

Uila software solutions are designed with ease of installation and simplified maintenance in mind. The Uila team is dedicated to exceeding your expectations, and knows that any downtime is too much in today's competitive world. Our goal is to keep your applications running 24 X 7. We offer a simple and effective support program to meet your needs. Customers who purchased Uila products and under support contract will receive the following benefits:

- Unlimited support via email or phone call
- Free software minor release update
- Free software major release upgrade

Email: support@uila.com Phone: (408) 819-0775

About Uila

Uila gives IT infrastructure teams x-ray vision for their data center operations and end user experience. Designed for Private, Public and Hybrid Cloud environments, Uila's Application-Centric Data Center Infrastructure Monitoring and Analytics provide instant visibility into hotspots and bottlenecks in any data center. Uila provides service dependency mapping, full stack correlation with 1-click root cause analysis and patented deep packet inspection technology that understands over 2,700 application protocols for transactional meta data analysis. Businesses use Uila to align themselves with their IT Operations team and cut time to resolution from days to minutes, keep their application at peak performance at all time and ensure end-user satisfaction to the fullest.