



uila

Updated Feb 2023

Installation Guide for Uila uObserve VIC SaaS Uila Deployment

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Introduction

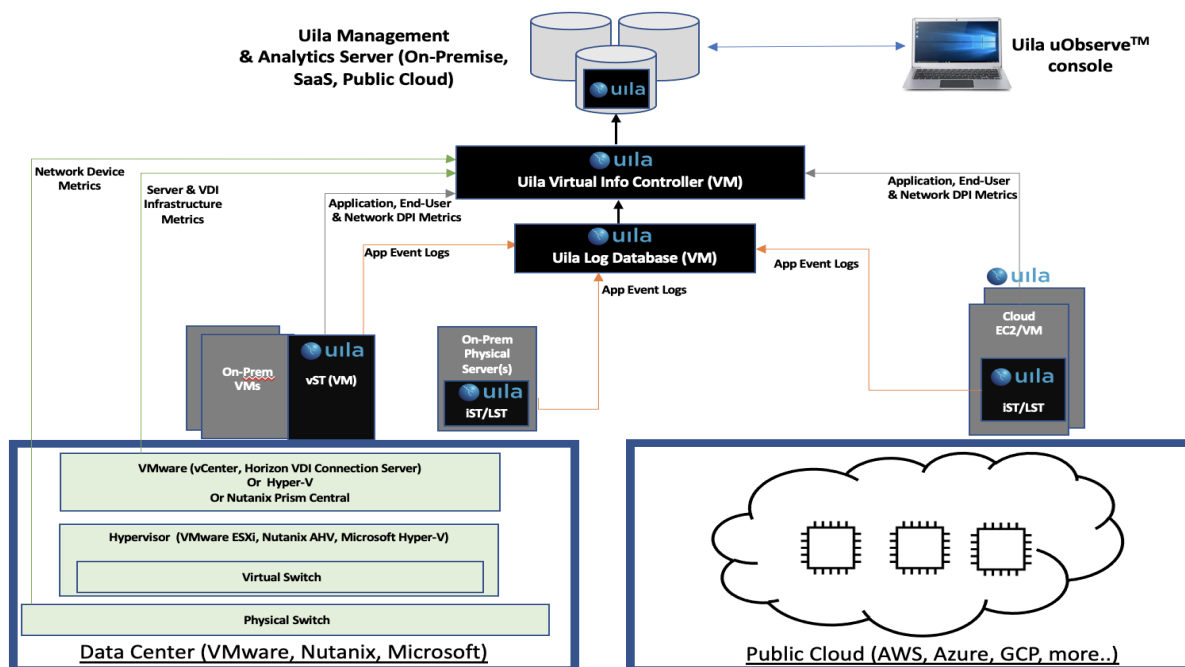
Scope and Purpose

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 VMware and is familiar with the configurations and operations of VMware.

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

uObserve™ consists of a few major components –

- **Management and Analytics system (UMAS)** – The core of the Uila virtual infrastructure architecture is a big data store and analytics engine that is designed from ground up to scale-out to accommodate large data center deployments with thousands of servers, to scale-in to record data in high resolution, maintain historical data while maintaining real time responsiveness. Built-in redundancy offers high availability, mitigates downtime,

and reduces maintenance overhead. UMAS can be installed in the Private, Public or SaaS Cloud.

The analytics engine is the brain that correlates application to infrastructure performance metric by providing the smarts to pinpoint the infrastructure root cause behind application performance degradation. The trending reports generated from the historical data helps identify infrastructure hotspots and maintains optimal application performance.

- *Virtual Information Controller(vIC)* - The vIC can be installed in either the Private or Public Cloud. In the Private Cloud, Virtual Information Controller (vIC) is the integration conduit to the VMware Horizon VDI infrastructure & Virtualization Management System e.g., VMware vCenter, Microsoft Hyper-V, Nutanix Prism Central or OpenStack Controller. The vIC retrieves your infrastructure configuration as a template to build Uila monitoring domain and to streamline deployment. The vIC collects network, storage and compute performance metrics that are maintained by vCenter (or equivalent from Microsoft, Nutanix, OpenStack) and combines it with the application and network metadata from all deployed vSTs. In the Public Cloud, the vIC collects the Instance & VM level networking, application, compute statistics from the vSTs. In both cases, the vIC securely transmits it to the Uila Management and Analytics System, either on-premise or in the cloud.
- *Uila Log Database Server*- The Uila Log Database Server can be installed in either the Private or Public Cloud. The Uila Log Database Server collects and consolidates logs and log statistics from multiple Logging Smart Taps (LST). The Uila uObserve web console requests the log data from Uila vIC, which in turn queries the Log Database Server and delivers it back to the Uila UMAS server.
- *Virtual Smart Tap(vST)* – vST is deployed at the host as a small footprint guest VM that utilizes Deep Packet Inspection (DPI) technology to identify unique applications and its attributes. The vST measures application response time and collects network performance data. No packet payload is examined or stored, thus removing the risk of exposing sensitive data.

In a cloud deployment, the VST, also collects the network and performance metrics from the IST and utilizes the Deep Packet inspection technology to identify applications.

- *Instance Smart Tap (IST)* – The Uila Instance Smart Tap (iST) is deployed as a plug-in in a distributed manner across the Public Cloud on the VMs or Instances running the

application workload. It collects traffic as well as VM and Instance level Compute statistics and sends it to the vST for Deep Packet Inspection.

- *Logging Smart Tap (LST)* – The Uila Logging Smart Tap (LST) is deployed as a plug-in in a distributed manner across the Data Center on VMs/Physical Servers and Public Cloud in the VMs or Instances. It collects logs from the server and/or application and sends it to the Uila logging server for further analysis.

Getting Started

System Requirements

Always refer to the Uila website for updated system requirements as the first step:
<https://www.uila.com/products/uila-system-requirements>

- Internet Browser for your monitoring console
 - Firefox, Chrome on Windows platform
 - Safari, Firefox, Chrome on OS X platform
 - Firefox, Chrome on CentOS, Ubuntu Linux platform
- VMware version requirements
 - vSphere ESXi 5.5 or higher
 - vCenter Server 5.5 or higher
- VMware® NSX requirement (if Applicable)
 - NSX-V
 - NSX-T™ Data Center
- Uila Virtual Smart Tap (vST) requirements -
 - **vST for On-Premise** -
 - Installed as a guest VM
 - 1 vCPU (1 Core)
 - 1Gb memory
 - 2Gb Storage

- **VIC for VMware requirements**

- Installed as a guest VM
- 4 vCPU
- Memory:

Small VIC 24 GB RAM allocated (32 GB if using Horizon VDI integration) , 12GB RAM reserved, 50GB storage, thin provisioned: <1000 VMs, less than 200 Network Monitoring ports, less than 100 nodes for server monitoring

Medium VIC 32 GB RAM allocated (40 GB if using Horizon VDI integration), 16GB RAM reserved, 100GB storage, thin provisioned: 1000~2000 VMs, 200~400 Network Monitoring ports, 100~200 nodes for server monitoring

Large VIC 48 GB RAM allocated (56 GB if using Horizon VDI integration), 24GB RAM reserved, 200GB storage, thin provisioned: 2000~5000VMs, 400~600 Network Monitoring ports, 200-400 nodes for server monitoring

Proper vCenter access right is required for vIC to collect structural information and CPU, memory and storage metrics from vCenter, make configuration changes, deploy and setup vST VM. You must have one of the two options pre-configured before vIC deployment:

1. Full administrative access right (vCenter administrator role), or
2. Partial administrative access right with the following table of privileges enabled (checked).

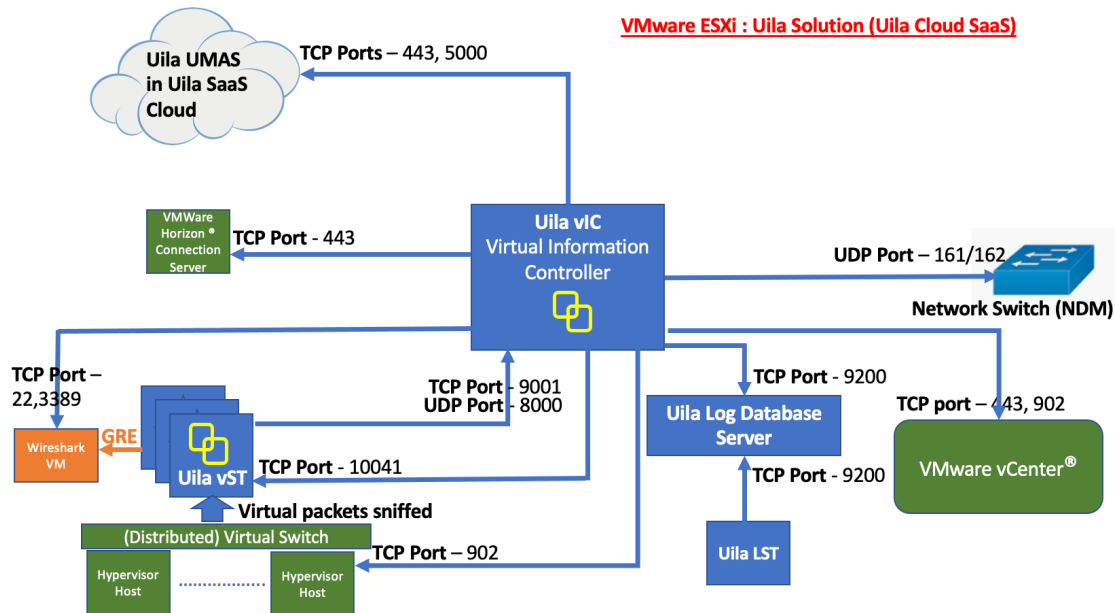
Privilege Categories	Privilege Items
Datastore	<ul style="list-style-type: none"> • Allocate space • Browse datastore • Remove file
Global	<ul style="list-style-type: none"> • Cancel task
Host	<ul style="list-style-type: none"> • Local operations->Create virtual machine • Local operations->Delete virtual machine • Configuration → Network Configuration
Network	<ul style="list-style-type: none"> • Assign network
Resource	<ul style="list-style-type: none"> • Assign virtual machine to resource pool

	<ul style="list-style-type: none"> • Modify resource pool
Scheduled task	<ul style="list-style-type: none"> • Create tasks • Modify tasks • Remove tasks • Run task
Virtual machine	<ul style="list-style-type: none"> • Configuration • Guest Operations • Interaction • Inventory • Provisioning • Service configuration • Snapshot management • vSphere replication
dvPort group	<ul style="list-style-type: none"> • Create • Delete • Modify
vApp	<ul style="list-style-type: none"> • Add virtual machine • Assign resource pool • Assign vApp • Import

Table 4.2: vCenter access rights table

- **Network requirements**
 - o Pre-allocate one IP address for each of the vST's, which can be either static IP address or allocated via DHCP, prior to deployment
 - o Pre-allocate one static IP address for vIC prior to deployment

- o Pre-configure your network to open TCP and UDP ports to allow communications between Uila sub-systems as illustrated in the chart below.
 - o UMAS –
 - If Cloud UMAS is being used, add ugw1s.uila.com/38.99.127.15 as permitted site on the firewall.
 - Pre-allocate one static IP if the on premise UMAS is used.

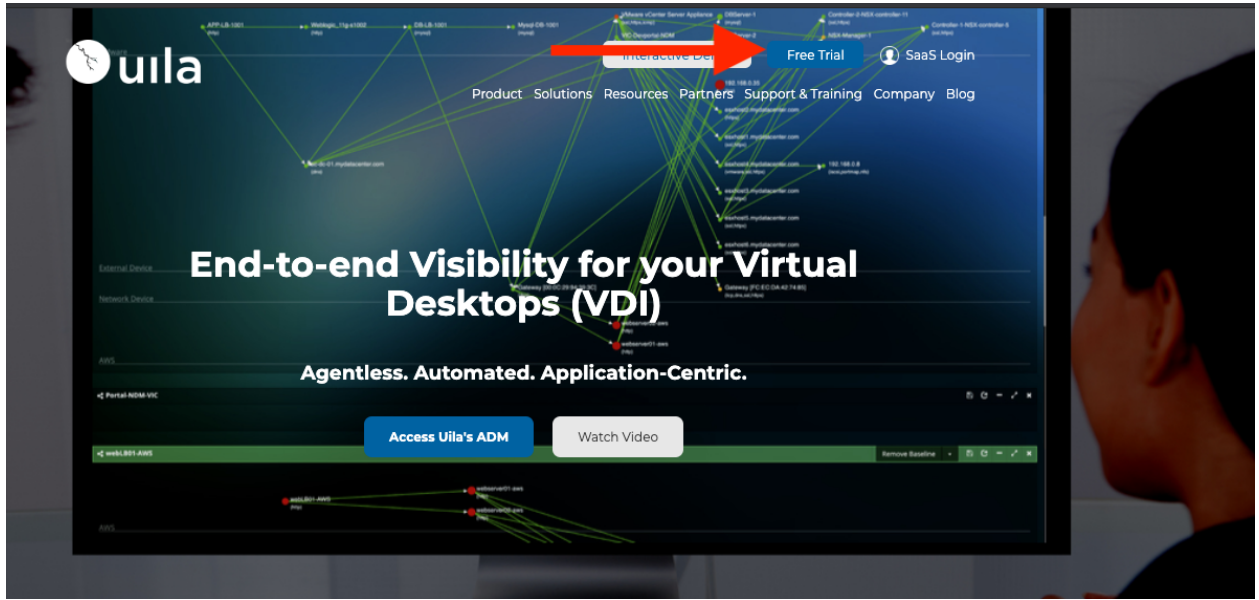


Network connection overview for Uila SaaS Cloud

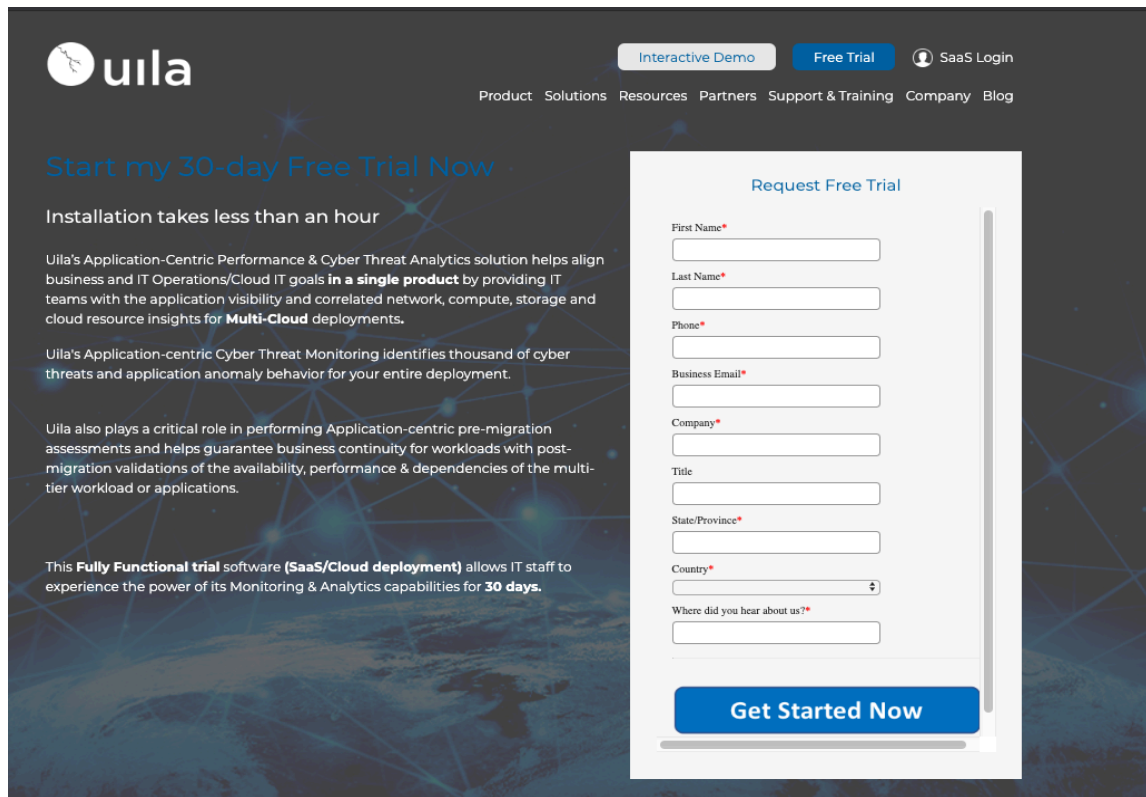
User Registration

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

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




3. Fill out the form and click on “Get Started Now”.



After you have spoken to a Uila sales team member and get approval for conducting a trial, you can visit: <https://portal.uila.com/register> to complete the registration form and receive registration confirmation.

Uila Free Trial



Trial Request & Registration

You must create a login ID to request and access the Uila trial

Registration is FREE*

*Login ID

*Password

*Confirm Password

*First name *Last name

*Company email

*Phone

*Company name

State

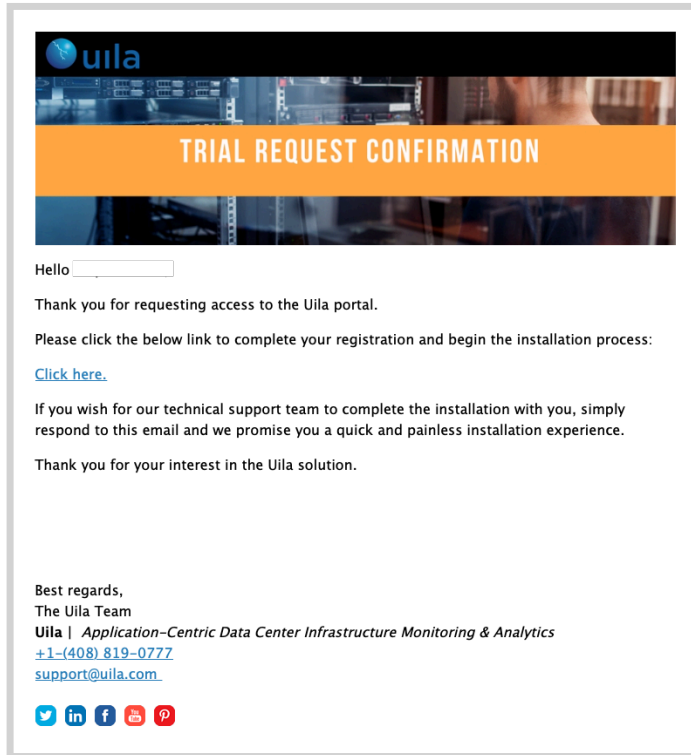
United States

I agree with the [Terms and Conditions](#)

Registration completed!

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

4. Receive registration email with the link for completing the registration and beginning the installation.



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

Hello customer,

We have approved your Uila account registration. In order to start the installation, please sign in with the login ID and password you entered when you registered your Uila account.


Sign In

Login ID

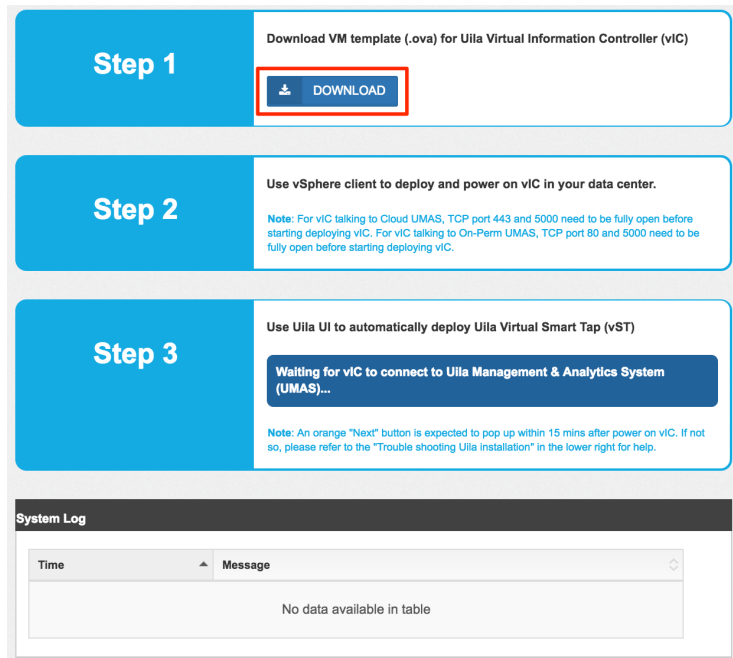
Password

[Forgot password?](#)

If you have any problem signing in, please contact tech support at (408) 819-0775 or email to support@uila.com

 Sign in

2. Download the VM template for Uila Virtual Information Controller(vIC)



Step 1 Download VM template (.ova) for Uila Virtual Information Controller (vIC)

DOWNLOAD

Step 2 Use vSphere client to deploy and power on vIC in your data center.

Note: For vIC talking to Cloud UMAS, TCP port 443 and 5000 need to be fully open before starting deploying vIC. For vIC talking to On-Perm UMAS, TCP port 80 and 5000 need to be fully open before starting deploying vIC.

Step 3 Use Uila UI to automatically deploy Uila Virtual Smart Tap (vST)

Waiting for vIC to connect to Uila Management & Analytics System (UMAS)...

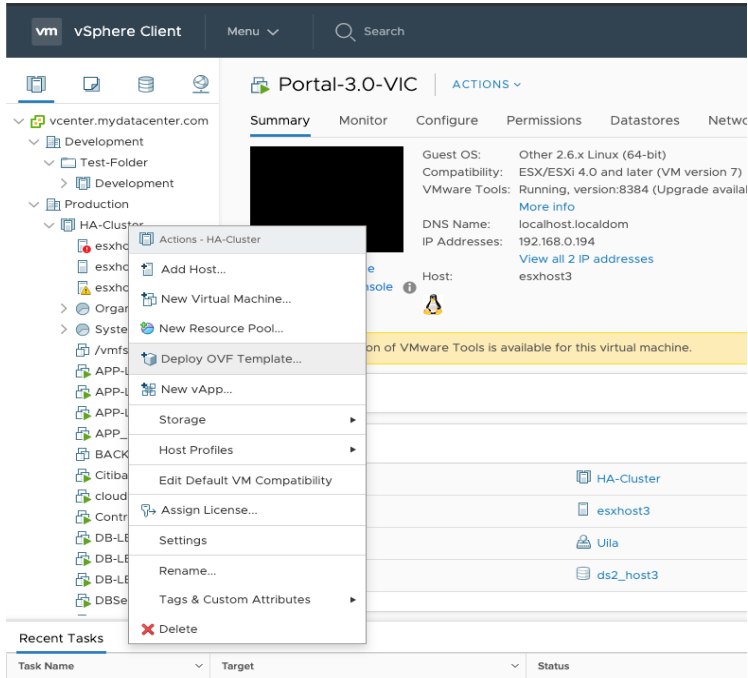
Note: An orange "Next" button is expected to pop up within 15 mins after power on vIC. If not so, please refer to the "Trouble shooting Uila installation" in the lower right for help.

System Log

Time	Message
No data available in table	

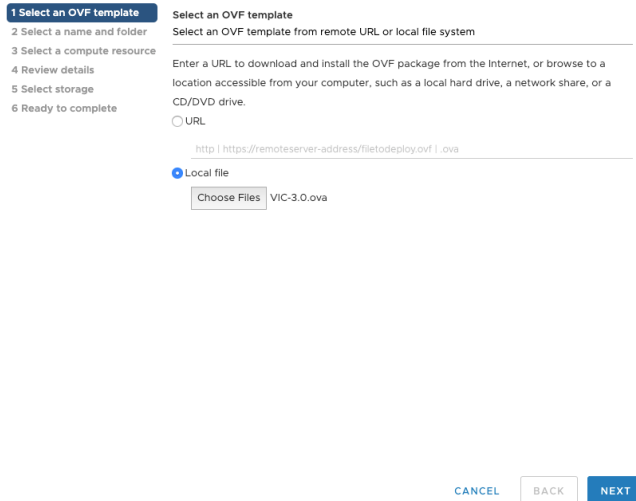
3. Login to vCenter

4. Deploy vIC.ova in vCenter



5. Browse to locate the vIC.ova file

Deploy OVF Template



6. Choose name and folder location

Deploy OVF Template

✓ 1 Select an OVF template
 2 Select a name and folder
 3 Select a compute resource
 4 Review details
 5 Select storage
 6 Ready to complete

Select a name and folder
Specify a unique name and target location

Virtual machine name:

Select a location for the virtual machine.

- ▼ vcenter.mydatacenter.com
 - > Development
 - > **Production**
 - > VDI

CANCEL BACK NEXT

7. Select the Compute Resource and click Next

Deploy OVF Template

✓ 1 Select an OVF template
 ✓ 2 Select a name and folder
 3 Select a compute resource
 4 Review details
 5 Select storage
 6 Ready to complete

Select a compute resource
Select the destination compute resource for this operation

- ▼ Production
 - ▼ HA-Cluster
 - esxhost1
 - esxhost2
 - esxhost3
 - > Organization vDC (4938fd1d-9f9a-4362-82cd-998543fff674)
 - > System vDC (7cdf4cfd-1bc4-4279-996c-75b742a7e17d)
 - > Standard-Cluster

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

8. Review the details of the VIC and click Next

9. Accept the EULA and click Next

10. Select Uila deployment configuration, whether small, medium or large depending on the number of VM's in the environment.

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- 6 Configuration**
- 7 Select storage
- 8 Select networks
- 9 Customize template
- 10 Ready to complete

Configuration
Select a deployment configuration

	Description
<input checked="" type="radio"/> Small Uila Deployment	Use Small Deployment configuration for Datacenter environment with less than 500 VMs. Uila Information Controller will need 2 vCPUs and maximum of 4 GB memory.
<input type="radio"/> Medium Uila Deployment	
<input type="radio"/> Large Uila Deployment	

3 Items

CANCEL BACK NEXT

11. Select the datastore for the vIC and select disk format to be thin provisioned for more efficient usage of storage space.

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- 7 Select storage**
- 8 Select networks
- 9 Customize template
- 10 Ready to complete

Select storage
Select the storage for the configuration and disk files

Encrypt this virtual machine (Requires Key Management Server)

Select virtual disk format: Thin Provision

VM Storage Policy: Datastore Default

Name	Capacity	Provisioned	Free	Type
datastore1	458.25 GB	115 TB	149.88 GB	VM
datastore1 (f)	458.25 GB	790.99 GB	98.19 GB	VM
ds2_host1	931.25 GB	792.99 GB	319.03 GB	VM
ds2_host2	931.25 GB	282.98 GB	734.55 GB	VM
ds2_host3	931.25 GB	456.89 GB	699.27 GB	VM
host3-local	458.25 GB	71.17 GB	410.42 GB	VM

Compatibility

✓ Compatibility checks succeeded.

CANCEL BACK NEXT

12. Select a network port group where the vIC can communicate with the vST and the UMAS.

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- 8 Select networks**
- 9 Customize template
- 10 Ready to complete

Select networks
Select a destination network for each source network.

Source Network	Destination Network
Network 1	Uila-BW

1 Items

IP Allocation Settings

IP allocation: Static - Manual

IP protocol: IPV4

[CANCEL](#)
[BACK](#)
[NEXT](#)

13. Review all the settings and click finish.

Deploy OVF Template

Click Finish to start creation.

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- ✓ 8 Select networks
- ✓ 9 Customize template
- 10 Ready to complete**

Provisioning type	Deploy from template
Name	UilaVIC
Template name	uila-vim_OVFIO
Download size	1.8 GB
Size on disk	3.6 GB
Folder	Production
Resource	HA-Cluster
Location	datastore1
Storage mapping	1
All disks	Datastore: datastore1; Format: Thin Provision
Network mapping	1
Network 1	Uila-BW
IP allocation settings	
IP protocol	IPV4
IP allocation	Static - Manual

[CANCEL](#)
[BACK](#)
[FINISH](#)

14. Once the system is deployed, power on the vIC. Depending on the VMware environment this process may take several minutes.

15. Once the system is deployed, power on the vIC. Depending on the VMware environment this process may take several minutes.
16. Open the remote console to configure the VIC virtual machine
 - i. Press “Y” to agree to the Software License Agreement
 - ii. Go through the setup wizard to setup IP configuration

```
Setup Network Configuration for Interface eth0
Setup DHCP for interface eth0 [y/n]? n
Enter IP address: 192.168.0.50
Enter Subnet mask: 255.255.254.0
Enter Gateway: 192.168.0.1
Enter DNS IP: 192.168.0.20
Enter NTP Server:

Setup Static Network Information:
IP      : 192.168.0.50
MASK    : 255.255.254.0
GATEWAY: 192.168.0.1
DNS     : 192.168.0.20
NTP     :
Confirm? (y/n): _
```

- iii. In case of portal installation, type “y” for portal service

```
Setup Uila Software ...
Is vIC using Uila Portal Service? [y/n]
```

- iv. Enter the vCenter login credentials

```
Setup VMware vCenter Login Credentials.
Enter VMware vCenter Login Server: 192.168.0.151
vCenter Login (example@domain.local): administrator@vsphere.local
vCenter Password:
Confirm Password:
Completing the installation. It may take a while ...
```

17. Once you see the login screen, the installation is complete

Now proceed to install the Virtual Smart Tap (vST)

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) 400-3706

About Uila

Uila resolves Complex IT Disruptions for Enterprise Organizations with its Intelligent Full-Stack Observability Platform, that correlates Application and Infrastructure Performance to isolate and remediate issues before business impact. With Uila, IT teams can visualize application workload dependencies across cloud platforms, rightsize infrastructure resources, troubleshoot disruptions for any onsite or remote VDI user due to application/network/infrastructure challenges, plan workload migration strategies for Cloud deployments and use AIOps to streamline troubleshooting and reduce MTTR with remediation actions. And most importantly, this is done WITHOUT any agents. Uila also allows security teams to combat advanced cyber threats, by providing comprehensive application anomaly insights, cyber threats & Data Exfiltration activities. Organizations use Uila to align themselves with their IT teams and cut MTTR from days to minutes to always keep End-User Experience at peak performance & secure, across cloud boundaries.