



Version 2.0
Installation Guide for Public Cloud vST/iST

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Introduction

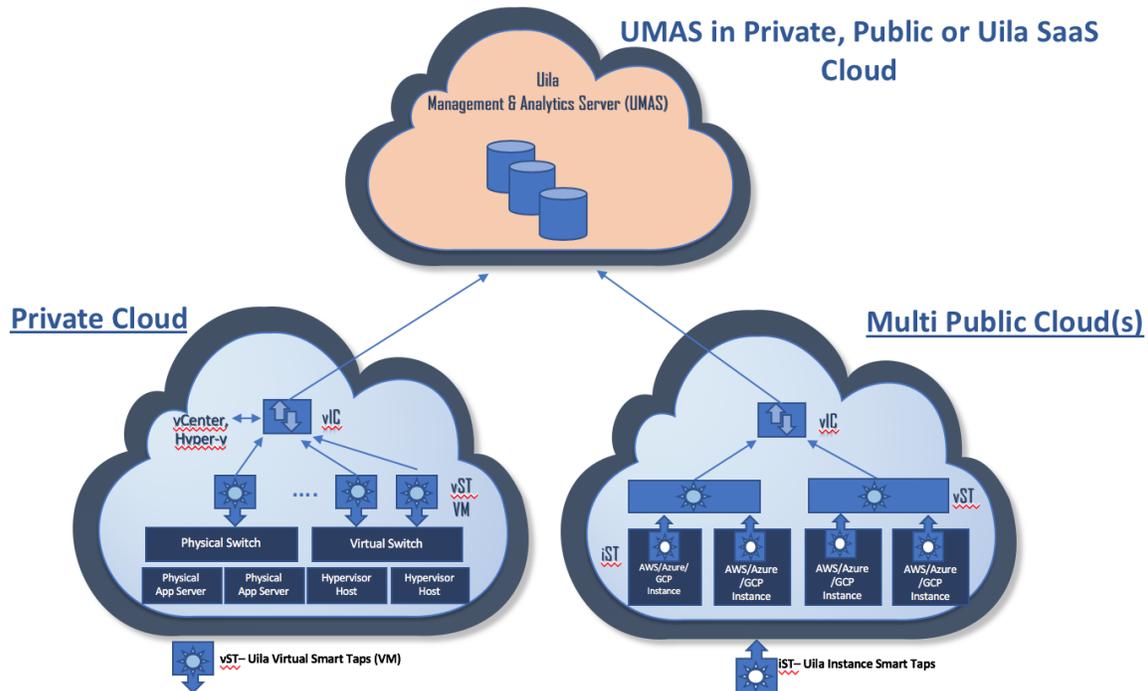
Scope and Purpose

This document describes the system requirements, installation and configuration steps for the Virtual Smart Tap(vST) and Instance Smart Tap(iST) in the Public Cloud.

It is assumed that the reader has already installed the Uila Virtual Information Controller(VIC) and the Uila Management and Analytics Server(UMAS).

Architecture Overview

The diagram below shows the Uila Management and Analytics System architecture(UMAS) and its relationship to Private and Public cloud environment.



Virtual Architecture

Uila consists of three major components –

- *Management and Analytics system(UMAS)* – UMAS is a big data store and analytics engine that was designed to accommodate a large data center deployment with thousands of servers. UMAS can store data for up to 1 year and record data in minute resolution, while maintaining real time responsiveness.

UMAS's built-in redundancy offers high availability, removes downtime and reduces maintenance overhead.

The UMAS can be used to provide a single pane of glass view for end-to-end visibility into performance, capacity and resource usage/allotments across all on-premise and cloud-hosted services (VMware, Microsoft Hyper-V, Amazon Web Services, Microsoft Azure, Google Cloud and other cloud provider deployments).

- *Virtual Information Controller(vIC)* - vIC is installed as a virtual appliance on-premise or on cloud datacenter. The vIC retrieves the infrastructure configuration and collects network, storage and compute performance metrics. This is then combined with the data from the vST and transmitted to the UMAS.
- *Virtual Smart Tap(vST)* – vST is deployed at the host as a small foot print 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.

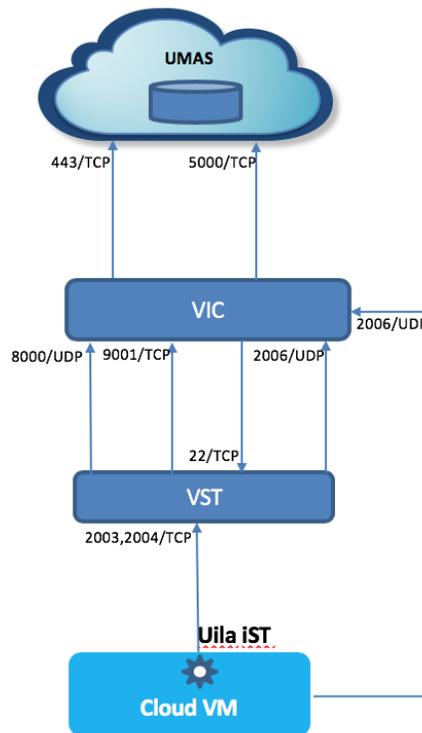
- *Instance Smart Tap (iST)* – The Uila Instance Smart Tap (iST) is deployed as a plug-in in a distributed manner across the Public Cloud on the VMs or Instances running the application workload. It collects traffic as well as VM and Instance level Compute statistics and sends it to the vST for Deep Packet Inspection.

Getting Started

System Requirements for vST/iST

- Uila Virtual Smart Tap (vST) requirements -
 - o **vST for Public Cloud** –
 - t2.large for AWS
 - D2s v3 for Azure
 - 2Gb disk space required during installation and 500 Mb in run time
 - CentOS or Redhat
- 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.
- The IST's will be installed as an agent inside the guest OS. It will use the IP address assigned to the guest OS.



Deploy Uila Virtual Smart Tap

1. Setup a brand new VM/Instance for the vST. The recommended guest OS is CentOS or RedHat.
2. Upload the VST installer to the VM
 - a. The installer file will be provided by Uila and its name would resemble “**installer-vst-2.0.0-SNAPSHOT-bin-final.tar.gz**”
 - b. Upload the Uila Installer file to “**/opt**”
3. Execute the vST installation -
 - a. Run the commands -
 - i. **tar -xvf installer-vst-2.0.0-SNAPSHOT-bin-final.tar.gz**
 - ii. **cd UilaInstaller/**
 - iii. **./install.sh -rpcap deployment.properties**

4. Configure the cloud vST
 - a. Run the command –
 - i. `/opt/uila/VST/bin/setconfig -v <VIC IP address>`
5. Now go to finish the cloud VST configuration –
 - a. Go to settings → vST configuration
 - b. Click on Cloud vST
 - c. You will see the Cloud vST appear
 - d. Under “Actions” click on “config”
 - e. Fill in the field below to identify the Cloud vST



Deploy Uila Instance Smart Tap (iST) for Windows

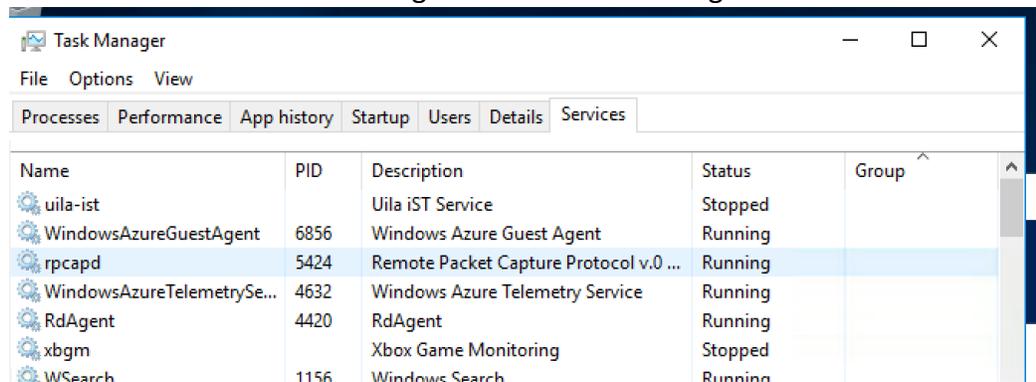
1. Install Winpcap on the target VM –
 - a. https://www.winpcap.org/install/bin/WinPcap_4_1_3.exe
2. Install Microsoft Visual C++ 2010 SP1 Redistributable Package(x64)
 - a. <https://www.microsoft.com/en-us/download/details.aspx?id=13523>
3. Download the iST install image and copy it onto the target VM. This image will be provided by Uila.
4. Install the iST on the target VM
 - a. Unzip the iST install package
 - b. Launch PowerShell as administrator

Name	
	Packet.dll
	pthreadVC2.dll
	rpcapd.conf
	rpcapd.exe
	uila-ist.ps1
	wpcap.dll

- c. Run the command below in PowerShell console to install iST
 - i. `PowerShell.exe -ExecutionPolicy UnRestricted -File uila-ist.ps1 -Setup`

5. Start the iST service

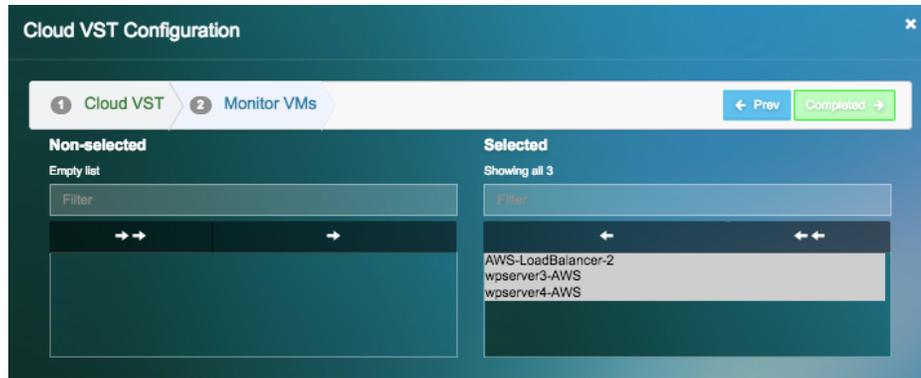
- a. You will see the Uila iST service and rpcap service in Windows Services
- b. Start the two services
- c. You will see the services running under the Task Manager



Name	PID	Description	Status	Group
uila-ist		Uila iST Service	Stopped	
WindowsAzureGuestAgent	6856	Windows Azure Guest Agent	Running	
rpcapd	5424	Remote Packet Capture Protocol v.0 ...	Running	
WindowsAzureTelemetrySe...	4632	Windows Azure Telemetry Service	Running	
RdAgent	4420	RdAgent	Running	
xbgm		Xbox Game Monitoring	Stopped	
WSearch	1156	Windows Search	Running	

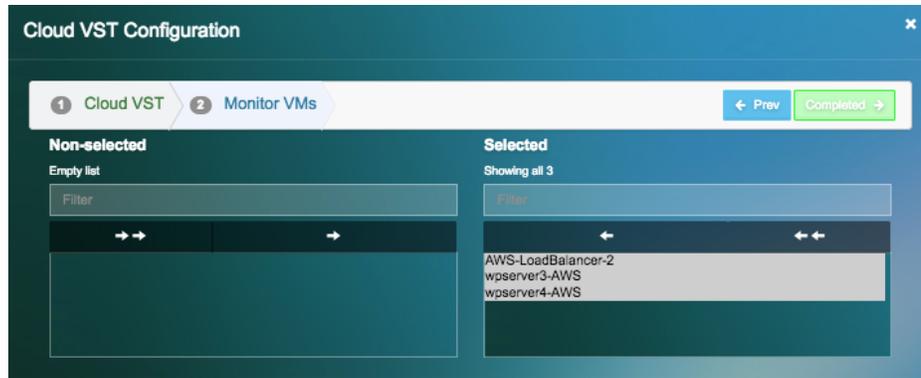
6. Go to the Uila Webpage

- a. Settings → VST Configuration
- b. Click on Cloud vST
- c. You will see the Cloud vST appear
- d. Under “Actions” click on “config”
- e. Fill in the field below to identify the cloud vST
- f. Click Next
- g. Now you will see the iST’s reporting to the cloud vST
- h. Select the appropriate iST’s that need to be monitored.



Deploy Uila Instance Smart Tap (iST) for Linux

1. Upload the iST installer to the VM
 - a. The installer file will be provided by Uila and its name would resemble **“installer-ist-2.0.0-SNAPSHOT-bin-final.tar.gz”**
 - b. Upload the Uila Installer file to **“/opt”**
2. Execute iST installation
 - a. `tar -xvf installer-ist-2.0.0-SNAPSHOT-bin-final.tar.gz`
 - b. `cd UilaInstaller/`
 - c. `./install.sh -vic <vic ip> deployment.properties`
3. Go to the Uila Webpage
 - a. Settings → VST Configuration
 - b. Click on Cloud vST
 - c. You will see the Cloud vST appear
 - d. Under “Actions” click on “config”
 - e. Fill in the field below to identify the cloud vST
 - f. Click Next
 - g. Now you will see the iST’s reporting to the cloud vST
 - h. Select the appropriate iST’s that need to be monitored.



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

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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.