NGINX Management Suite

App Delivery Manager TechXchange 2023 Lab

Brett Wolmarans, Fabrizio Fiorucci, Fouad Chmainy

5/1/2023

Objectives and agenda

Objectives

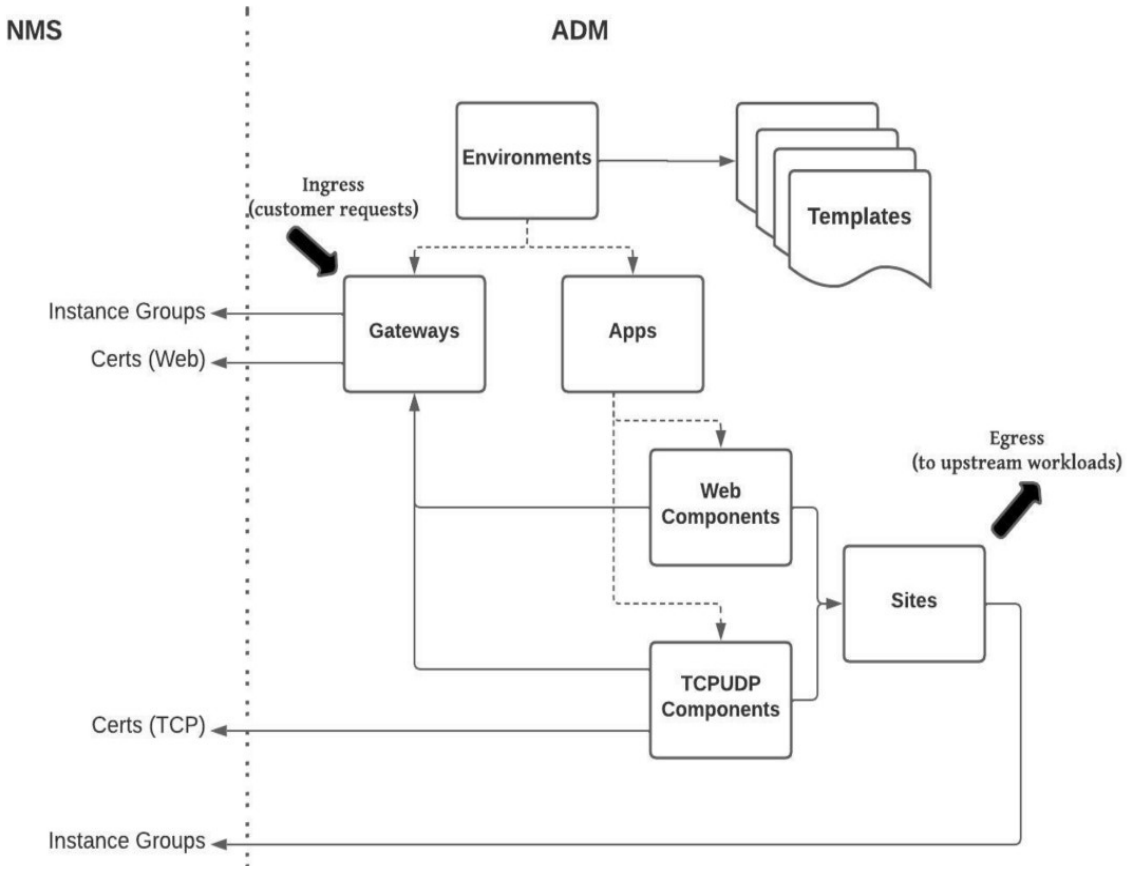
1. Become familiar with ADM hands-on for basic applications
2. Understand how to build your own more complicated scenarios in ADM including Templates

Agenda

1. Introduction to the Lab Environment
2. The basic Lab (45 minutes)
3. Introduction to Templates
4. The templates Lab (15 minutes)

ADM Concepts

API Object	Affected NGINX Contexts	Description
Environments	-	Logical separation of objects by organizations or deployment types.
Gateways	**Server blocks**	Definition of network entry point (ingress for NGINX+) for the app(s).
Apps	-	Logical grouping of components that define an individual app.
Web components	**HTTP Location blocks**	Definition of a microservice or part of a microservice that implements a HTTP or HTTPS app.
Workload Groups	**Upstreams**	Upstreams that are used in proxy_pass from the Web Components location blocks
TCP/UDP components	**server** (stream), **upstream** (stream)	Definition of a microservice or part of a microservice that implements a TCP, TC+TLS, or UDP app.
Sites	-	Logical separation of instance groups, typically based on locality.



Templates

Templates are a way to extend ADM. They are created on the box

/etc/nms/modules/adm/

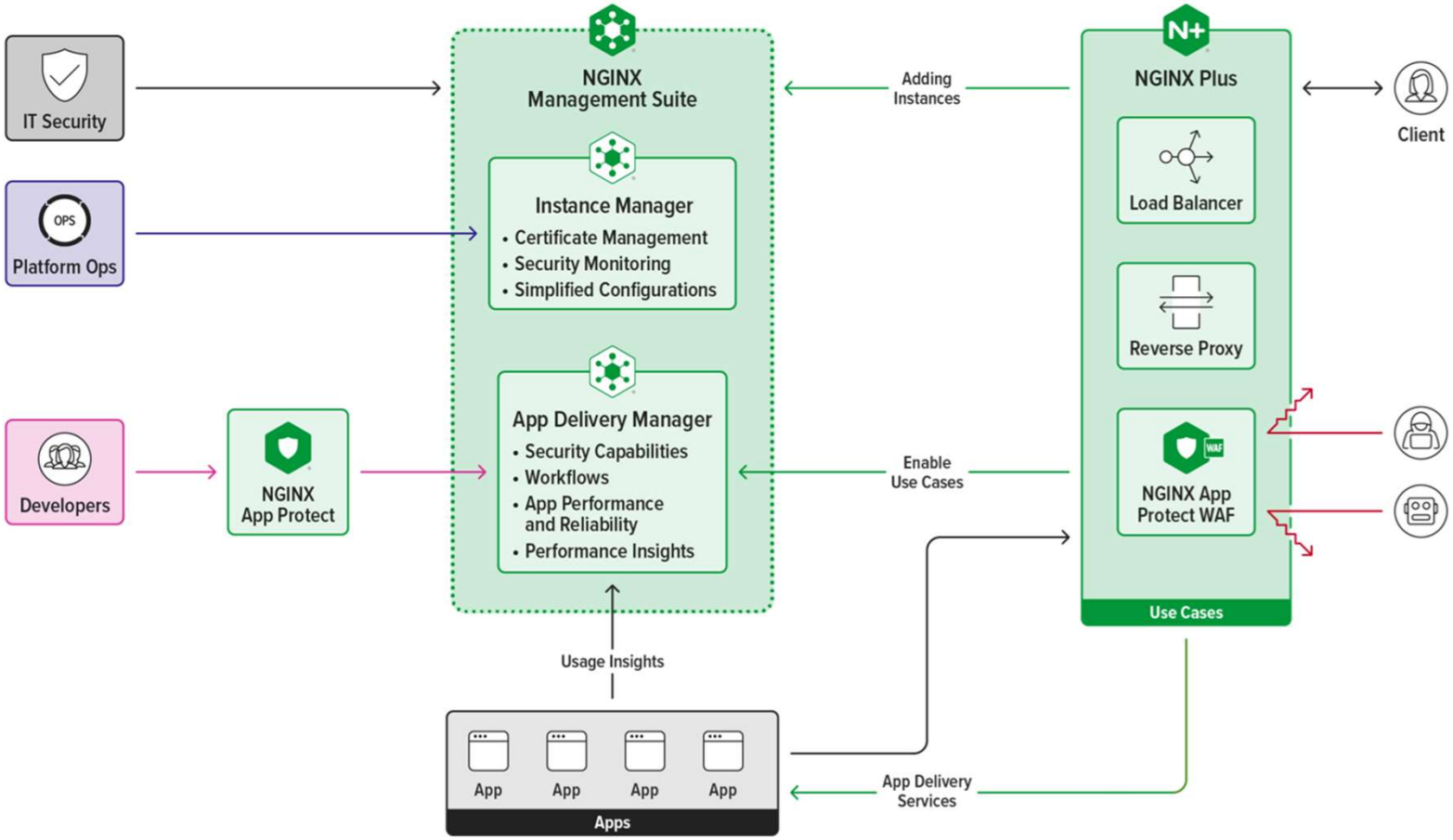
templates/

/base

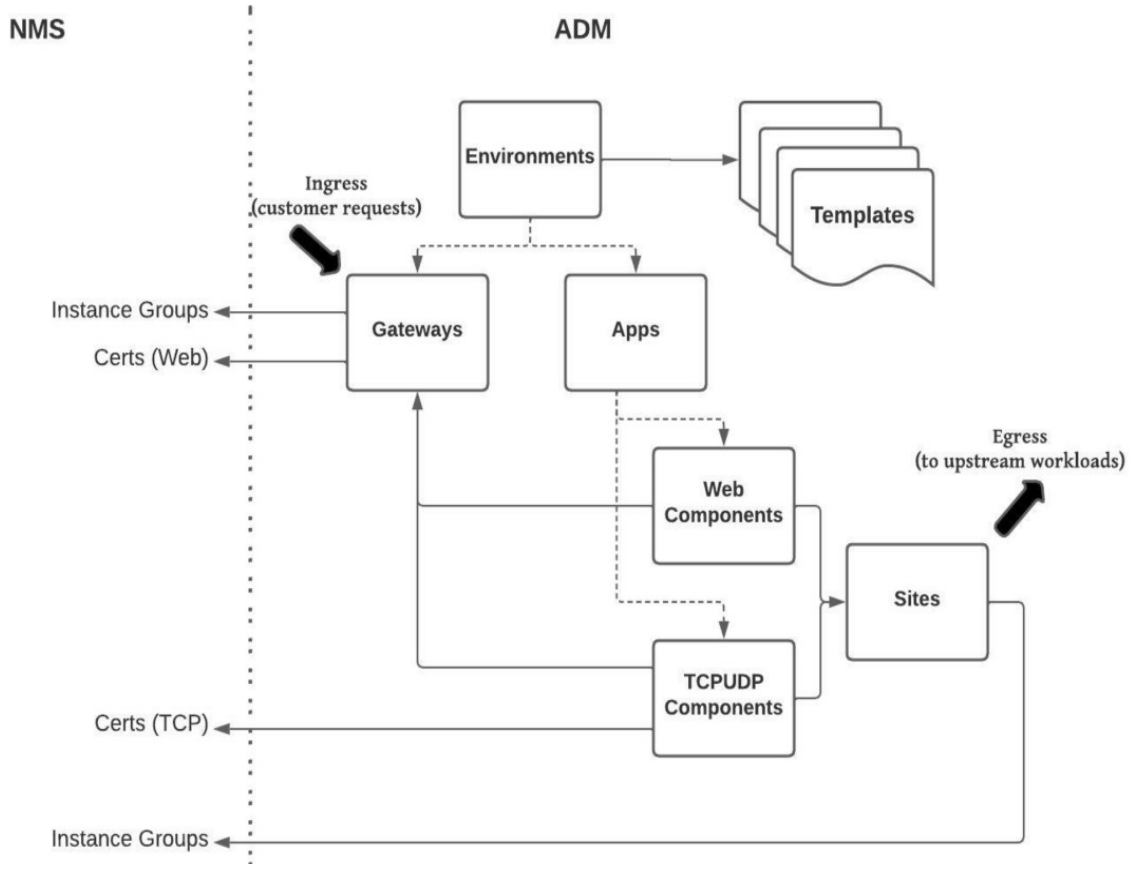
/use-cases

Use Case Template Schema	Purpose
gateway.json	Validates Gateway template input and augments Gateway UI.
web-component.json	Validates Web component template input and augments Web component UI, except the UI inside the URI.
web-component-locations.json	Validates Web component template input and augments ONLY the fields inside the URI.
tcp-udp-component.json	Validates TCPUDP component template input and augments TCPUDP component UI.

ADM High-Level Architecture

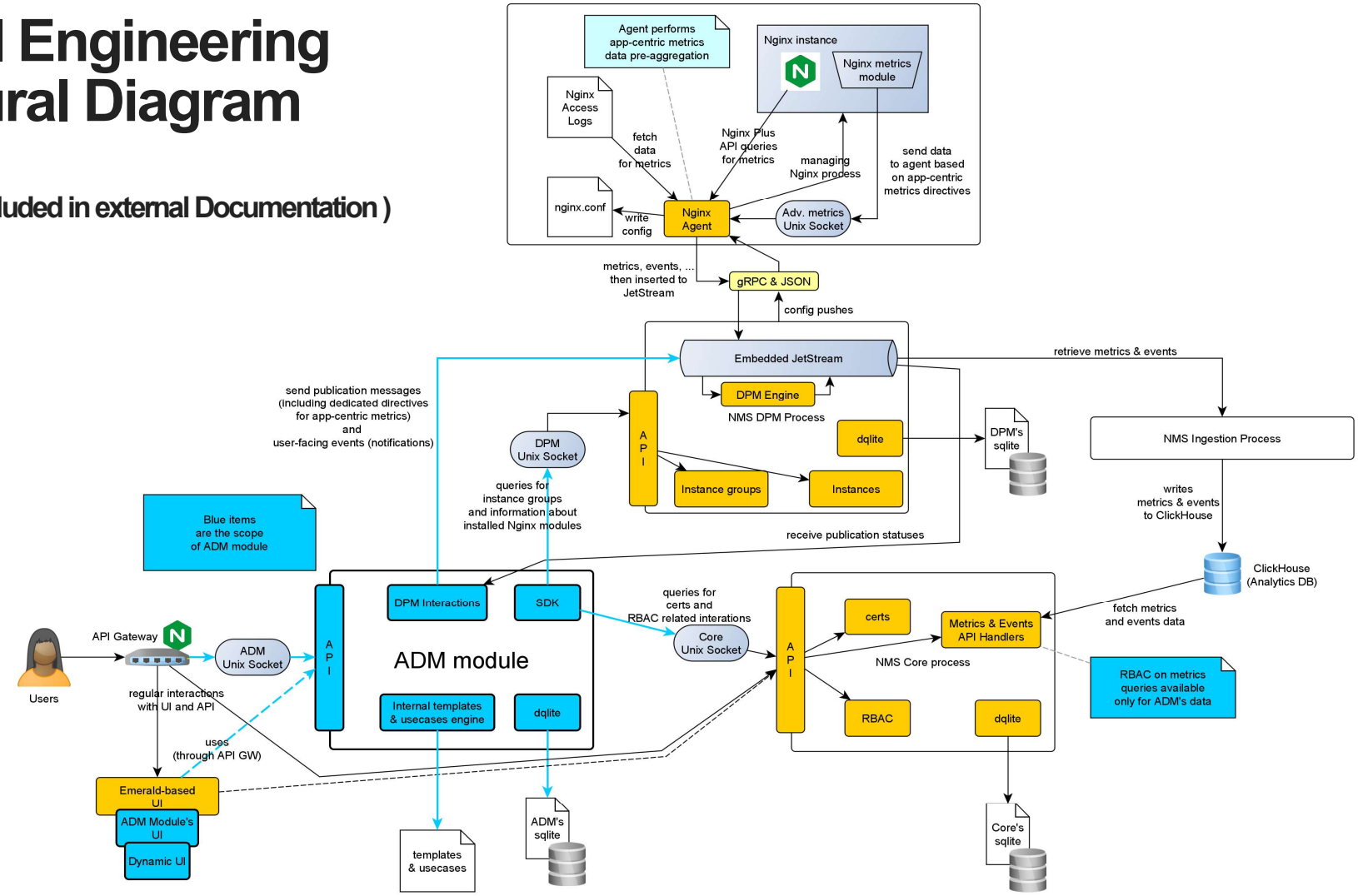


ADM Medium-Level Architecture



Low-Level Engineering Architectural Diagram

(Internal Only, not included in external Documentation)

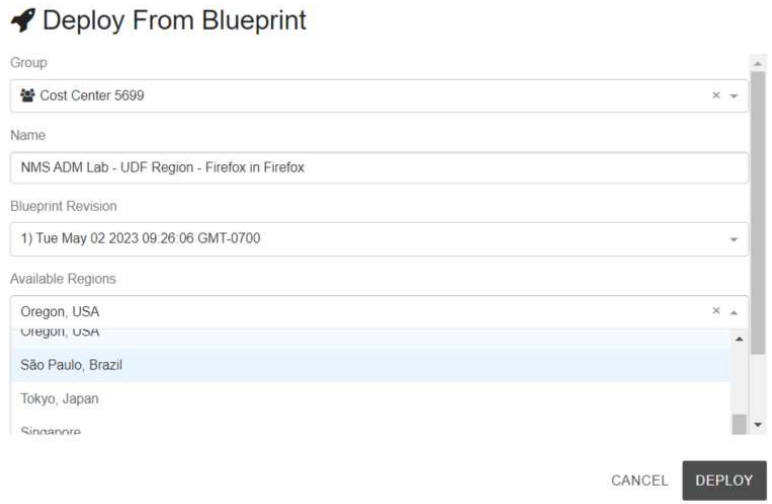


Introduction to the Lab Environment

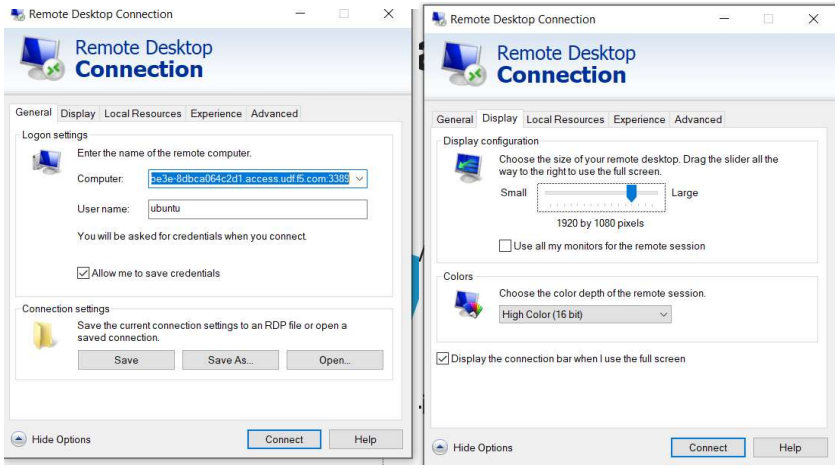
Subhead placeholder

- Deploy in your region closest to you (EMEA, APAC, AMER) the UDF Blueprint named:

NMS ADM Lab – UDF Region Firefox-in-Firefox



- View the Lab Guide in the “Documentation” Tab of the UDF Deployment
- RDP to the Ubuntu Jumpbox and do all your work from the Ubuntu Jumpbox. Set username to **ubuntu** and check “allow me to save credentials” and choose a screen resolution slightly smaller than your monitor, and choose a 16-bit color depth. Then save connection settings.



Lab Diagram

(also available in the lab guide docs)