

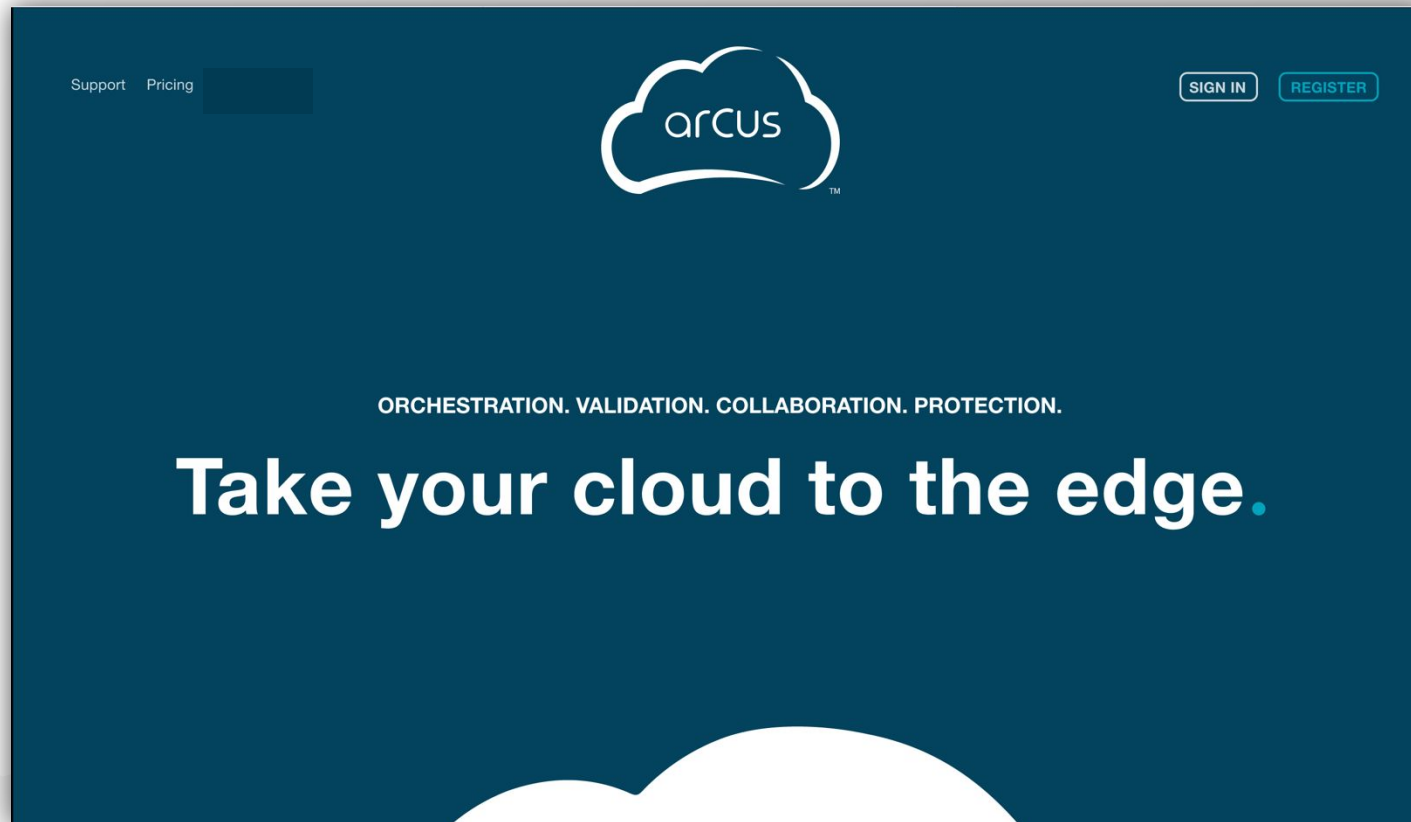


# Getting Started 201

# Arcus

makes users more successful, productive and secure  
in any cloud, using any technology.

It is the platform for where & how to get things done!



# Topics

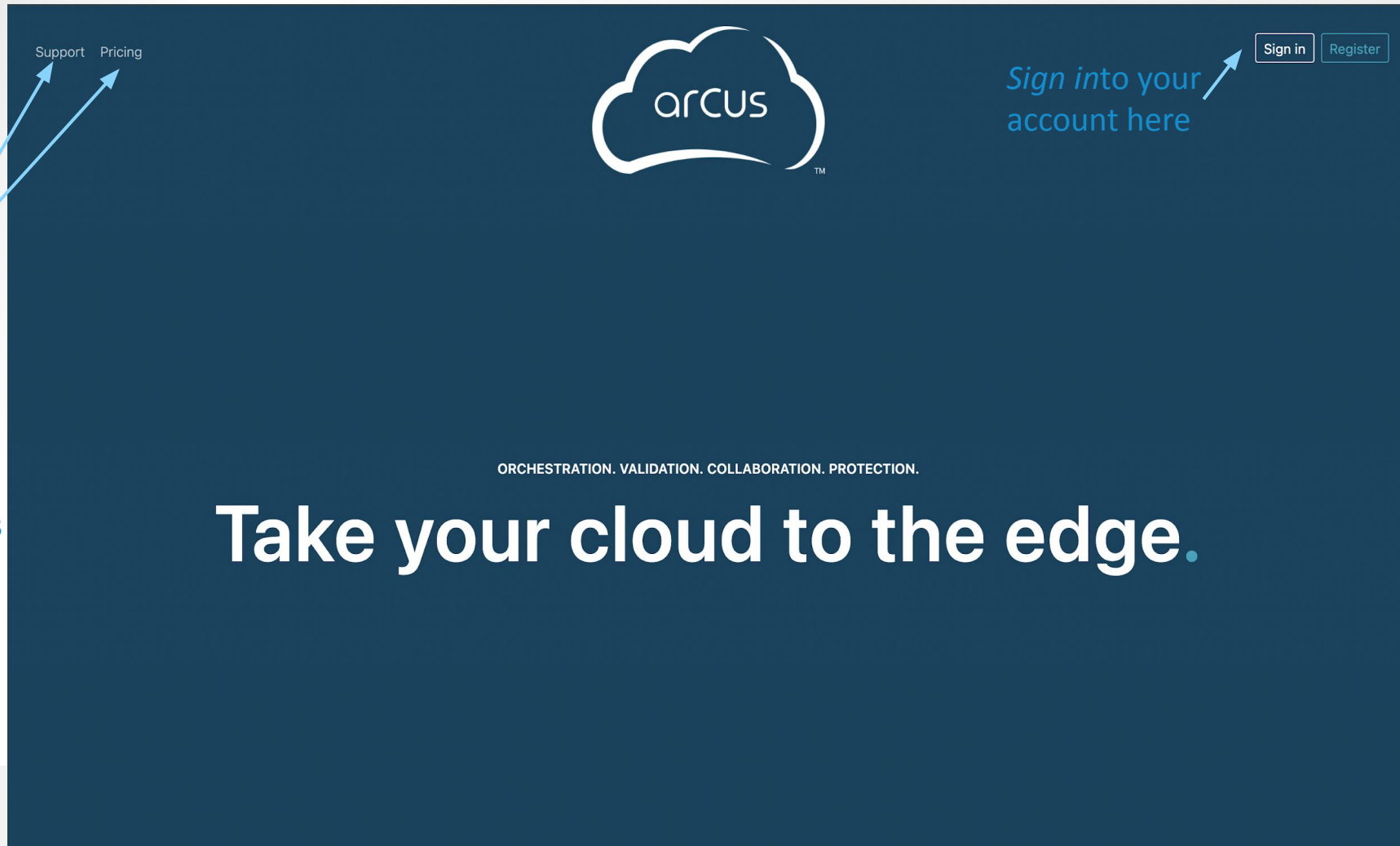
- Getting Started
- The Standard User Interface
- The Express User Interface
- Building...
  - Systems
  - Containers
  - Scenarios
  - Deployments
- Launching Deployment Runs
- Remote Access
- Support & Troubleshooting





# Getting Started

# Getting Started: Home Page



Explore these links, or scroll down to learn more about **Arcus**

Sign into your account here

Click *Register* to request an account



# Getting Started: Accounts

- New **Arcus** account requests with DoD credentials are activated
  - *Accounts idle for 30 days become inactive and must request reactivation/renew sponsorship.*
- New members can explore the Asset Library but cannot build nor launch anything until they added to a Project.
- If there is an error logging in, click the Account Assistance link...
  - *If the site requires certificate-based authentication, check the [Knowledge Base](#) for more information on troubleshooting account issues.*
- Users can:
  - Update their username, email, and phone
  - Set their default Project
  - Generate API tokens



# Getting Started: Projects & Permissions

- Requesting Access to a Project
  - From the top menu bar select *Projects*
  - Choose a Project to join
  - Click the blue *Request Access* button
  - A Project Manager will approve the request
- Adding Users to your Project as a Manager
  - Using the Project Management menu to add exiting user accounts to the project
  - Send email invitations to create an account & join the Project in one step
- In either method, the Project Manager will then set each user's permissions within the Project.

The screenshot displays the Arcus Admin web interface. On the left, a navigation sidebar lists various project components: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Add; Scenarios, Add; Container Apps, Systems, Add), Library (Applications, Add; Source Code, Add; Tests, Add; Container Images, Add; App Bundles), and Manage (Projects, Add; Clouds, Add; Cloudspaces). The main content area shows the 'Arcus Admin' project page with 19 members and no restrictions. A modal dialog asks 'Would you like to join this project?' with a 'Request Access' button. Below this, an 'Edit Membership' dialog is open, showing a list of permissions with checkboxes. The permissions include: 'Can view all resources shared within the project.', 'Can execute pre-configured deployment runs.', 'Can build composite assets and configure deployment runs.', 'Can import and manage software.', 'Can import and manage test assets.', 'Can share assets with members of the project.', 'Can share assets outside of the project.', 'Can upload assets to external services.', 'Can override deployment run power management settings.', 'Can administer this project.', 'Can manage project trusts and resources.', and 'Can moderate project membership.' The 'Save changes' button is highlighted in green.





# **The Standard User Interface**



# UI: Dashboard

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

arcus My Workspace My Teams Projects Site Admin

Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

**Compute**

- Hosts
- Runs

**Services**

- Storage **Add**

**Composites**

- Deployments **Add**
- Scenarios **Add**
- Container Apps
- Systems **Add**

**Library**

- Applications **Add**
- Source Code **Add**
- Tests **Add**
- Container Images **Add**

**Project Info**

**Arcus Demo**

members of 999  
No restriction

Go to project settings

**Site Alerts**

No site alerts

Manage site alerts

**Available Test Tools**

- Certify  
9.0.2.282
- LISA  
5.0.29
- Nessus  
8.13.1
- Script  
2.0.0
- soapUI  
5.2.1

**Automated Provisioning**

Memory usage (GB)

28  
27  
26

01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00  
Apr 26

**Deployment Runs**

View all deployment runs

**Cloudspace Status**

- Arcus Demo ● Online
- Arcus Demo GW1 ● Online
- Azure Virginia Dev ● Online

**Virtual Resources**

CPU  
14 / 999

Memory  
26 GB / 9.8 TB

Storage  
300 GB / 999.0 TB

Hosts  
3 / 999

GPU  
0 / 0

**Documentation**

- [Learn more about deploying Systems](#)
- [Learn more about Projects](#)
- [Learn more about Assets](#)
- [Learn more about Cloudspaces](#)
- [Learn about System Administration](#)

View all documentation

Note: Some overly restrictive IE policy enforcement may block the main navigation icons, but the menus still work.



# UI: Accounts

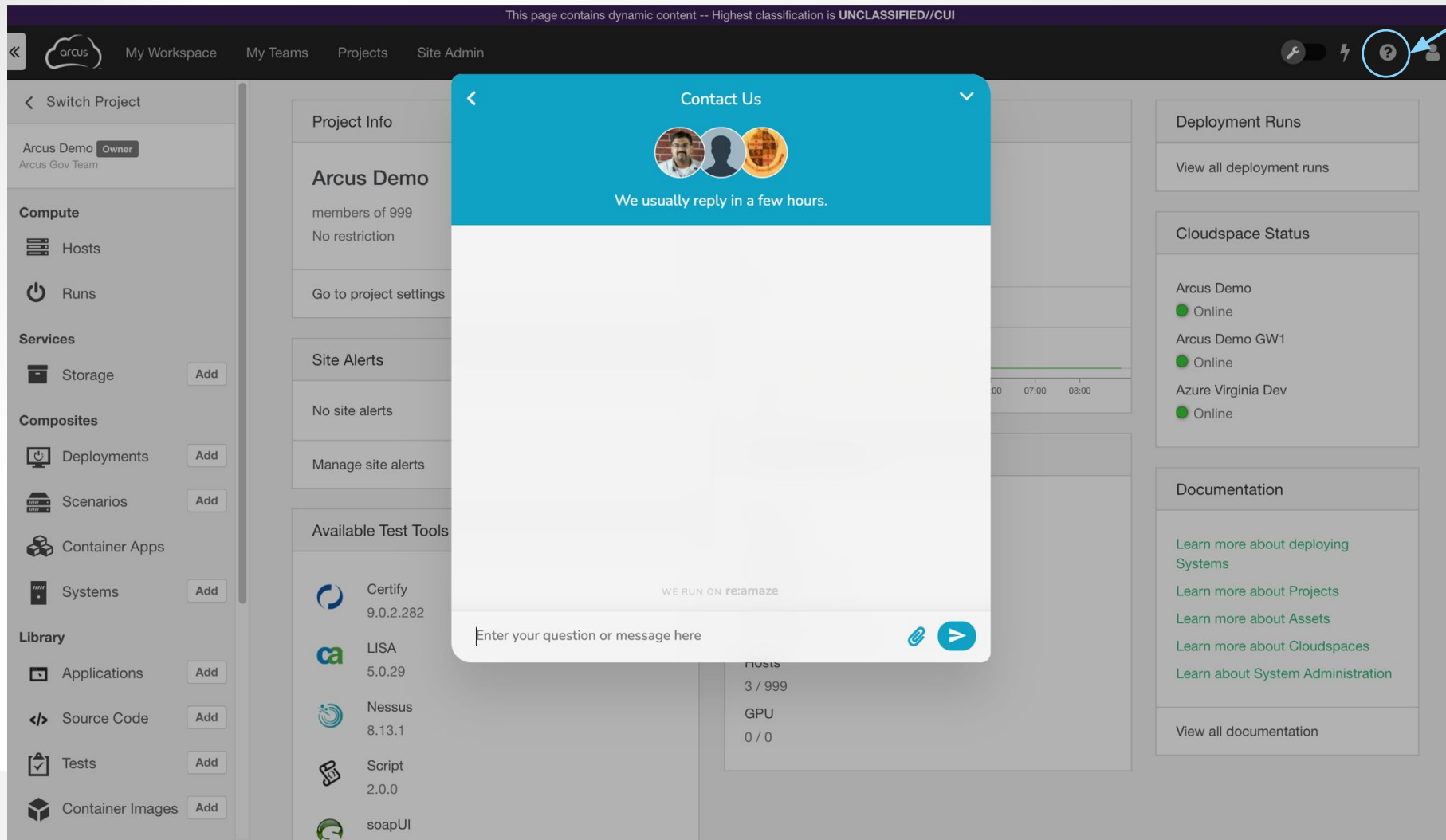
The screenshot displays the Arcus user interface. At the top, a navigation bar includes the Arcus logo, 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. On the right side of this bar, there are icons for a key, a lightning bolt, a question mark, and a user profile icon. The user profile icon is circled in blue, with a blue arrow pointing to it from the text 'Account Management' on the right. A dropdown menu is open from the user profile icon, listing the following options: 'bwalsh', 'Profile & Account', 'Support', 'Express Mode', and 'Sign out'. The main content area is divided into several panels: 'Project Info' for 'Arcus Demo' (999 members, no restriction), 'Automated Provisioning' (Memory usage graph), 'Deployment Runs', 'Cloudspace Status' (listing 'Arcus Demo' and 'Azure Virginia Dev' as online), 'Virtual Resources' (CPU, Memory, Storage, Hosts, GPU), and 'Documentation' (links to various guides). A left sidebar contains navigation options like 'Compute', 'Services', 'Composites', and 'Library', each with an 'Add' button. A security notice at the top reads: 'This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI'. A 'javascript:;' warning is visible in the bottom left corner.

Account Management

Note: Some overly restrictive IE policy enforcement may block the main navigation icons, but the menus still work.



# UI: Support



Help

*Note: Some overly restrictive IE policy enforcement may block the main navigation icons, but the menus still work.*



# UI: Main Menu

Toggle →

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

arcus My Workspace My Teams Projects Site Admin

Toggle

Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

**Compute**

- Hosts
- Runs

**Services**

- Storage **Add**

**Composites**

- Deployments **Add**
- Scenarios **Add**
- Container Apps
- Systems **Add**

**Library**

- Applications **Add**
- Source Code **Add**
- Tests **Add**
- Container Images **Add**

**Project Info**

**Arcus Demo**

members of 999  
No restriction

Go to project settings

**Site Alerts**

No site alerts

Manage site alerts

**Available Test Tools**

- Certify 9.0.2.282
- LISA 5.0.29
- Nessus 8.13.1
- Script 2.0.0
- soapUI 5.2.1

**Automated Provisioning**

Memory usage (GB)

28  
27  
26

01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00  
Apr 26

**Virtual Resources**

CPU  
14 / 999

Memory  
26 GB / 9.8 TB

Storage  
300 GB / 999.0 TB

Hosts  
3 / 999

GPU  
0 / 0

**Deployment Runs**

View all deployment runs

**Cloudspace Status**

- Arcus Demo **Online**
- Arcus Demo GW1 **Online**
- Azure Virginia Dev **Online**

**Documentation**

- [Learn more about deploying Systems](#)
- [Learn more about Projects](#)
- [Learn more about Assets](#)
- [Learn more about Cloudspaces](#)
- [Learn about System Administration](#)

View all documentation

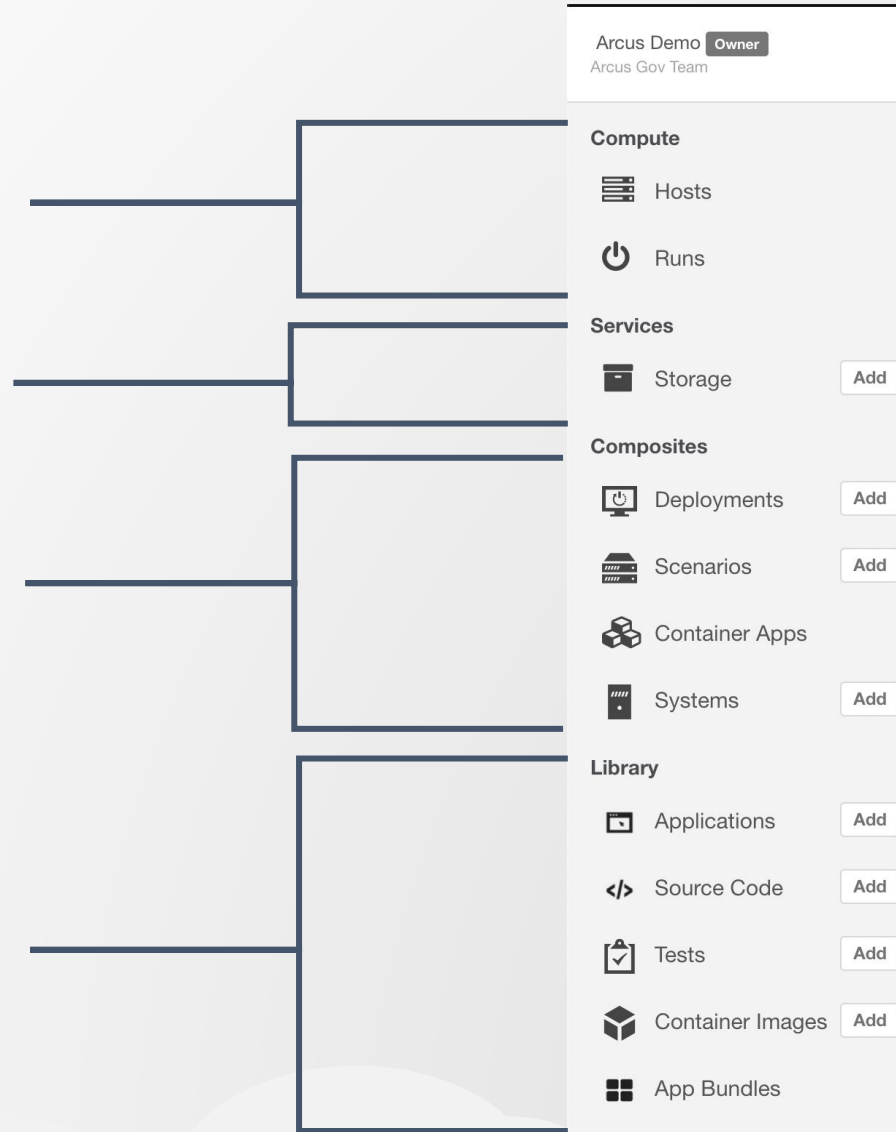
Main Menu

Note: Some overly restrictive IE policy enforcement may block the main navigation icons, but the menus still work.



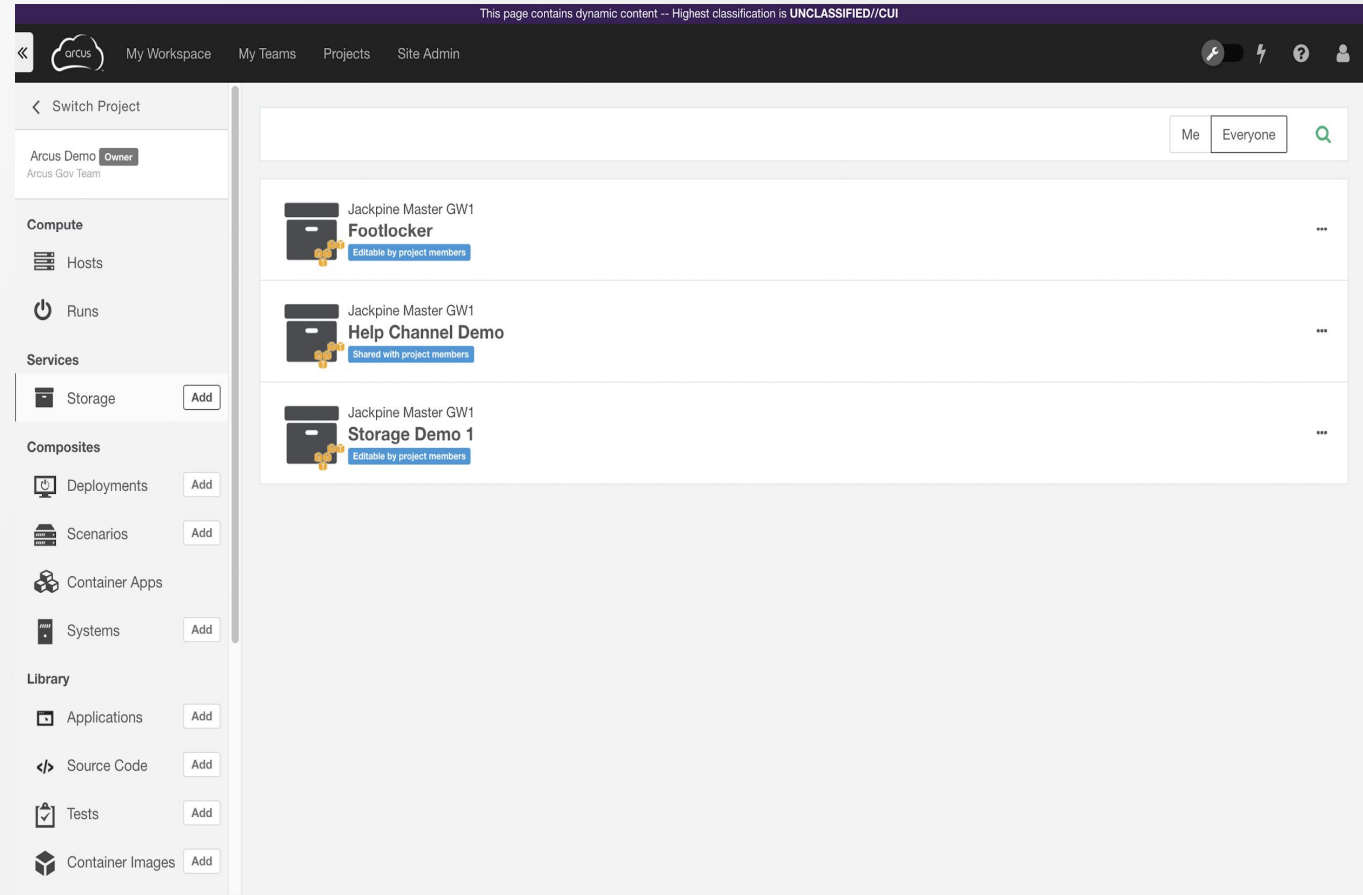
# UI: Main Menu - A Closer Look

- **Compute**
  - Hosts – Remote access to individual VM hosts
  - Runs – Remote access to deployed VMs
- **Services**
  - Storage Service – Credentialed file storage
- **Composites**
  - Deployments – Set deployment properties and testing
  - Scenarios – Combine multiple systems
  - Systems – OS with software assets
- **Library**
  - Applications – Build or import software assets
  - Tests – Create elastic tests
  - Container Images – Import container images
  - App Bundles – Combine packages of assets



# UI: Storage Service

- Create and manage storage resources in your chosen cloud provider via the Arcus UI
- Upload and download files up to 4GB in size
- Generate credentials to access these services from virtual hosts
  - Temporary
  - Host-specific
  - Reflect user roles and permissions

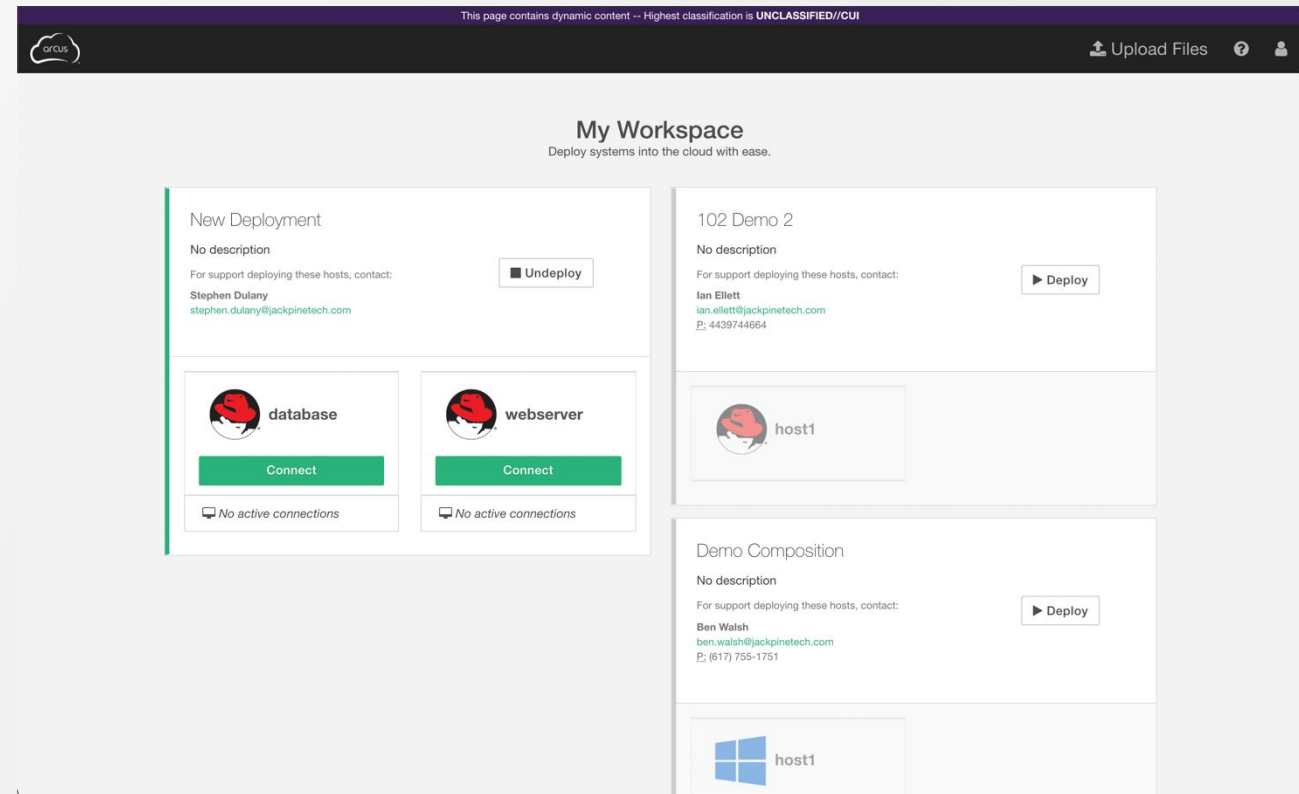




# **The Express User Interface**

# Express UI: Overview

- A way to deploy, access, and un-deploy selected Composite Assets in a simplified view
- Designed for users that do not need to create or modify Assets
- Express Users can connect to Runs and Scenarios that have been published as Compositions
- Project Managers can set the Express UI as the default mode for new users via the Project settings menu





# Express UI & Standard UI

## Express Users can...

- Deploy and 'Undeploy' Compositions
- Connect to deployed Host(s) through Remote Access
- Upload files via the Storage Service

## Standard Users can...

- Build Composite Assets (ex. Systems, Scenarios, and Deployments)
- Create credentialed Storage Services
- Perform tests on Host(s) and Source Code

This screenshot shows the 'My Workspace' dashboard for an Express user. The page title is 'My Workspace' with the subtitle 'Deploy systems into the cloud with ease.' The interface is divided into several sections:

- New Deployment:** A section for creating new deployments, including contact information for Stephen Dulany and buttons for 'Undeploy' and 'Deploy'.
- Hosts:** A section showing a host named 'host1' with a 'Deploy' button.
- Services:** A section showing 'database' and 'webservice' services with 'Connect' buttons and 'No active connections' status.
- Demo Composition:** A section for a 'Demo Composition' with contact information for Ben Walsh and a 'Deploy' button.


This screenshot shows the 'Standard UI' dashboard for the 'Arcus Demo' project. The page title is 'Arcus Demo' with the subtitle 'members of 999, No restriction'. The interface is divided into several sections:

- Project Info:** A section showing project details and a 'Go to project settings' button.
- Automated Provisioning:** A section showing a graph of 'Memory usage (GB)' over time.
- Site Alerts:** A section showing 'No site alerts' and a 'Manage site alerts' button.
- Virtual Resources:** A section showing resource usage: CPU (14 / 999), Memory (26 GB / 9.8 TB), Storage (300 GB / 999.0 TB), Hosts (3 / 999), and GPU (0 / 0).
- Deployment Runs:** A section showing 'View all deployment runs'.
- Cloudspace Status:** A section showing the status of various cloudspaces: Arcus Demo (Online), Arcus Demo GW1 (Online), and Azure Virginia Dev (Online).
- Documentation:** A section showing 'View all documentation' and links to learn more about deploying systems, projects, assets, cloudspaces, and system administration.



# Express UI: Compositions

- Compositions are created by Standard or Power Users for consumption by the Express Users in their Project
- Compositions can be published from an active Deployment Run or Scenario by clicking on the **Publish** button located in the upper right of the screen
- The author of a Composition can alter the name, Cloudspace, and any custom properties of the Composition


 **test 1**

Cloudspace  
Cloud Demo

Name  
test 1

Description  
(optional)

Done

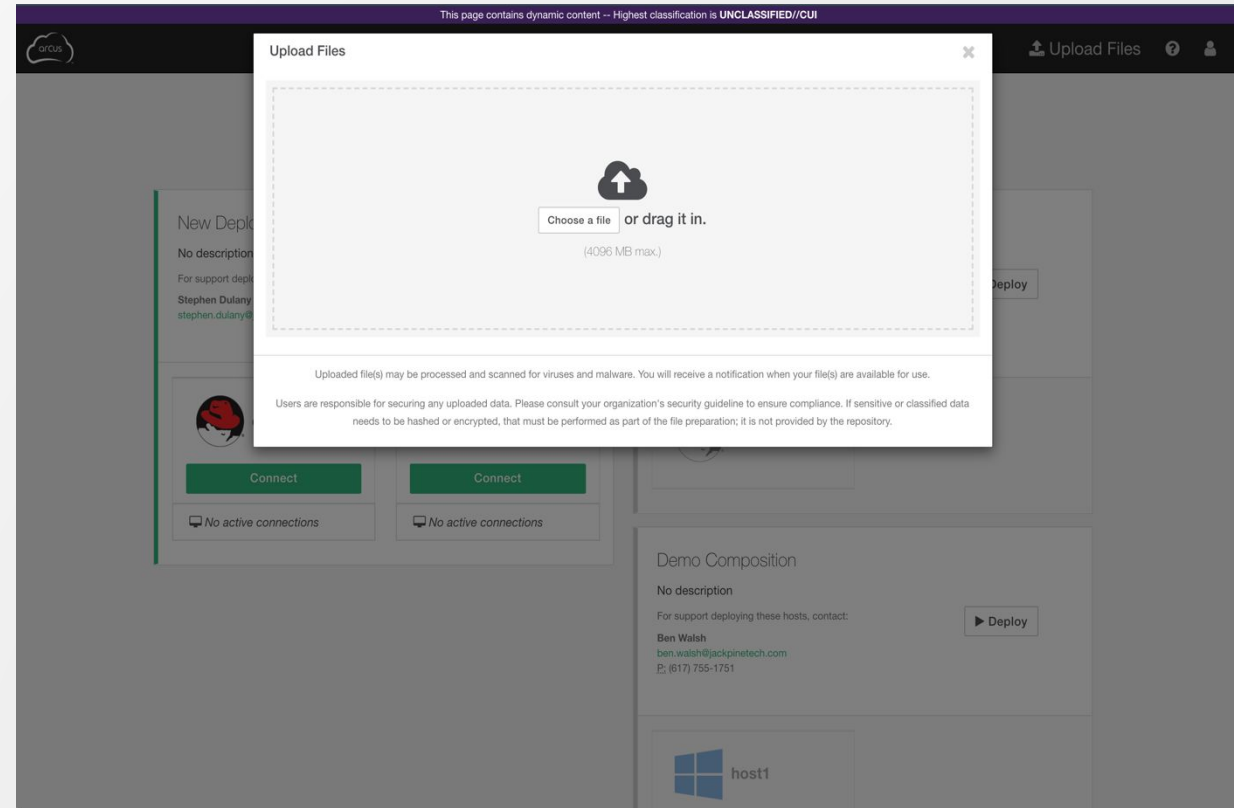
 **host1** Master  
Red Hat Enterprise Linux 7 | 64-bit

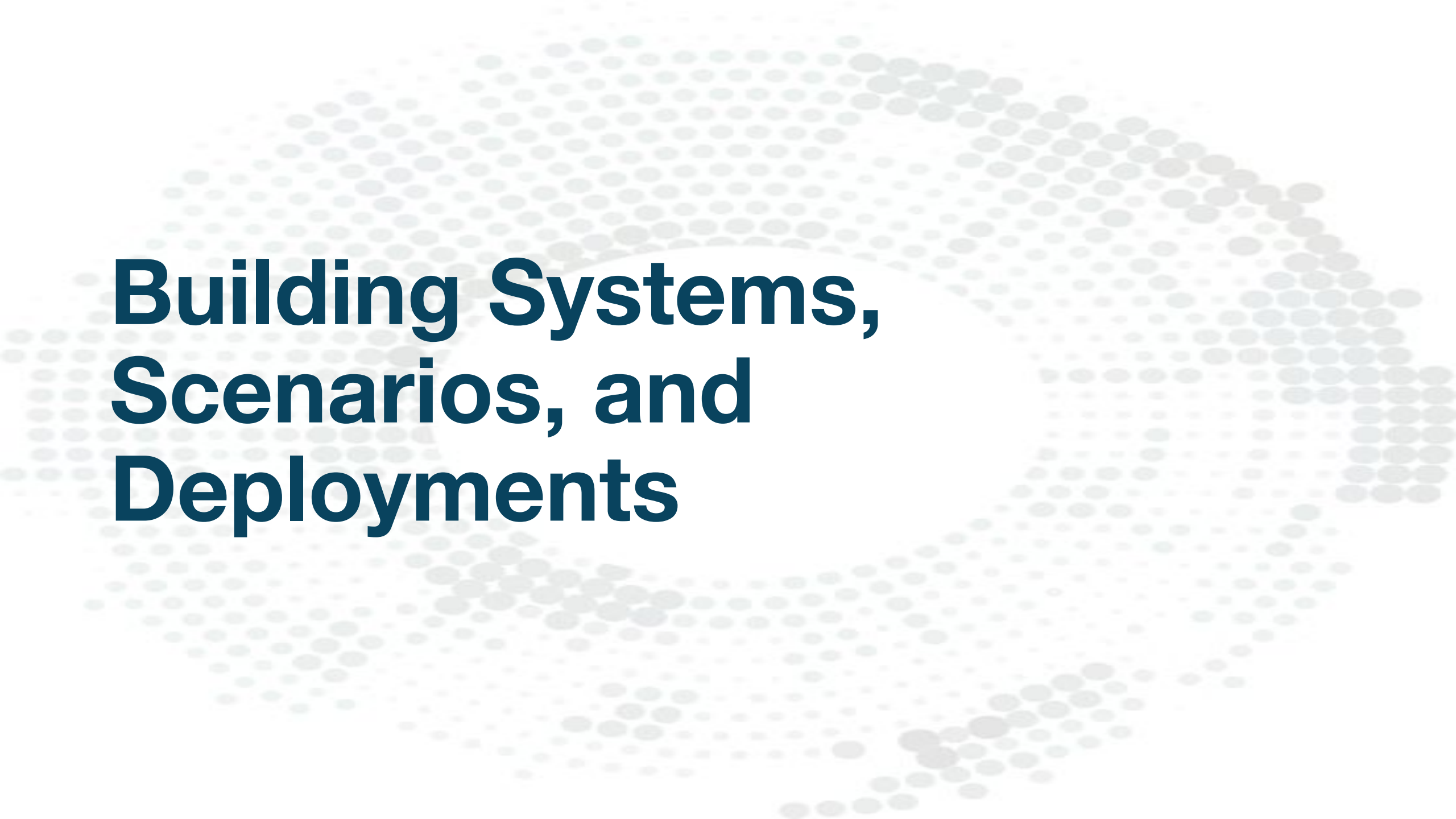
**Custom Properties**  
Additional key-value pairs that will be available during runtime.



# Express UI: Storage Service

- Upload files to the storage service by clicking the **Upload Files** button
  - Choose a file
  - Drag & drop
- These files will be uploaded to the Project's default storage service
- Upload files up to 4GB in size

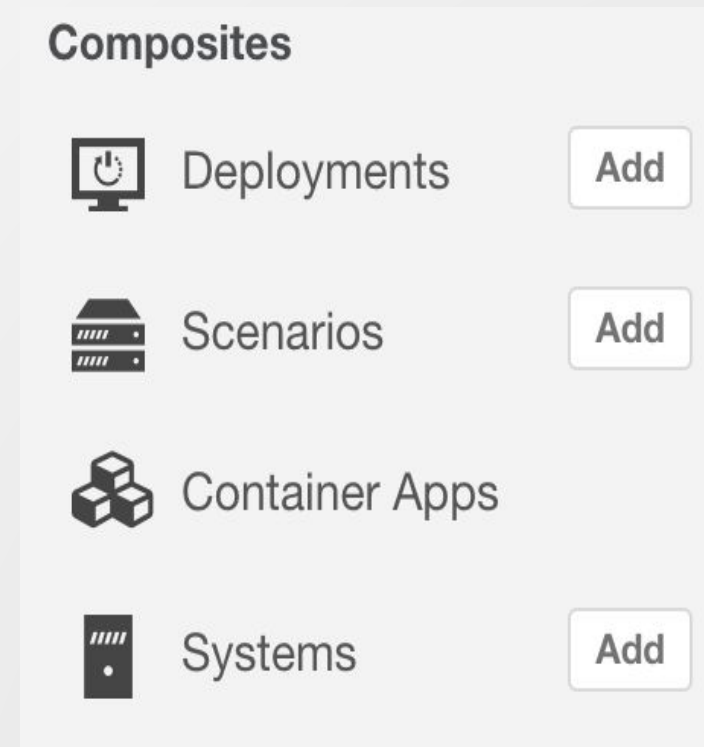




# **Building Systems, Scenarios, and Deployments**

# Builders

- Where you create & save Composite Assets
- These are designs and specifications for what will be built
- Builders persist during the session until they are saved or reset
- Each Builder has four steps





# **Building a System**

# Systems: What is a System?

- A **System** is the design of a single Virtual or Physical machine in Arcus
- This typically consists of an **Operating System** (OS) with **Software Assets**



# Systems: Basic Info

- Select the type of System:
  - Virtual
  - Template-Based
  - Physical
- Enter a Name for the System
- Enter a Description (optional)
- For a...
  - Virtual System, select an Operating System
  - Template-Based, select a specific Operating System Template
  - Physical, select a registered Physical Machine
- Only Virtual Systems are deployable across different Cloud technologies
- Not all Operating Systems will be available in all Clouds

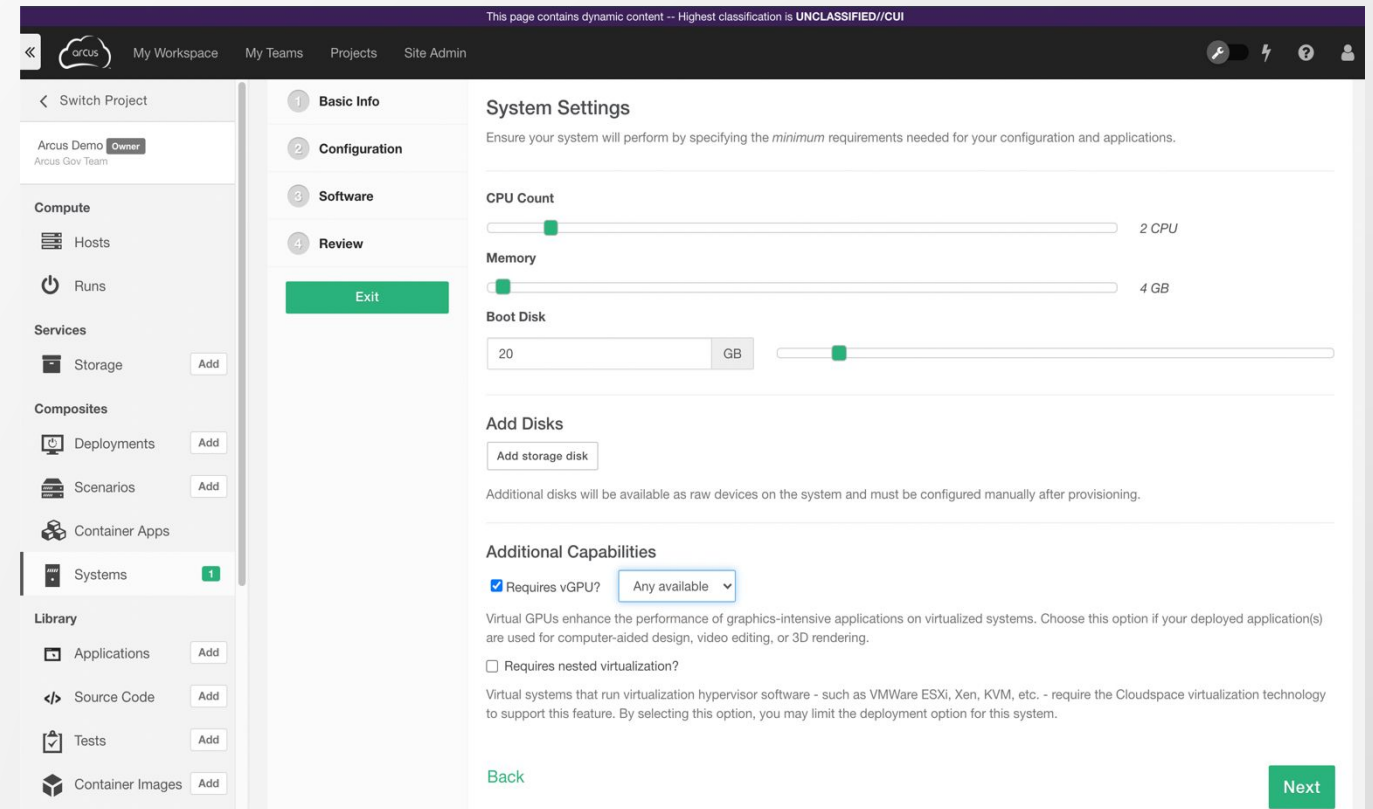
The screenshot displays the Arcus web interface for configuring a system. The top navigation bar includes 'Arcus', 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. A sidebar on the left lists various system components like 'Compute', 'Services', 'Composites', and 'Library', with 'Systems' highlighted. The main content area is titled 'Design Your System' and includes a progress indicator with steps: 1. Basic Info, 2. Configuration, 3. Software, and 4. Review. The 'Basic Info' step is active. Below the progress indicator, there are three radio buttons for 'System Type': 'Virtual' (selected), 'Template-Based', and 'Physical'. A 'Reset' button is located below these options. The form fields include: 'Name' (text input with 'Demo System'), 'Description (Optional)' (text area), and 'Operating System' (dropdown menu showing 'Red Hat Enterprise Linux 7 | 64-bit'). A 'Next' button is positioned at the bottom right of the form.





# Systems: Configuration

- Set requested **CPU** count
- Set requested **Memory**
- Set requested minimum **Boot Disk** size
- **Add** up to four additional disks (unformatted)
- Specify request number of **Network** interfaces
- Enable **Remote Access**
- Request **vGPU** capabilities
- Enable **Nested Virtualization**



The screenshot displays the Arcus Systems Configuration interface. The top navigation bar includes 'Arcus', 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area is titled 'System Settings' and includes a warning: 'This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI'. The interface is divided into a left sidebar and a main configuration area. The sidebar shows a 'Switch Project' dropdown set to 'Arcus Demo' (Owner: Arcus Gov Team) and a 'Library' section with categories: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Add; Scenarios, Add), Container Apps, and Systems (1). The main configuration area has a progress indicator with steps: 1. Basic Info, 2. Configuration, 3. Software, and 4. Review. A green 'Exit' button is visible. The 'System Settings' section includes: 'CPU Count' (slider set to 2 CPU), 'Memory' (slider set to 4 GB), and 'Boot Disk' (input field set to 20 GB with a slider). Below this is the 'Add Disks' section with an 'Add storage disk' button and a note: 'Additional disks will be available as raw devices on the system and must be configured manually after provisioning.' The 'Additional Capabilities' section has a checked 'Requires vGPU?' option with a dropdown set to 'Any available', and an unchecked 'Requires nested virtualization?' option. A 'Back' link is at the bottom left and a green 'Next' button is at the bottom right.

\*Configuration not applicable to Physical Systems



# Systems: Software

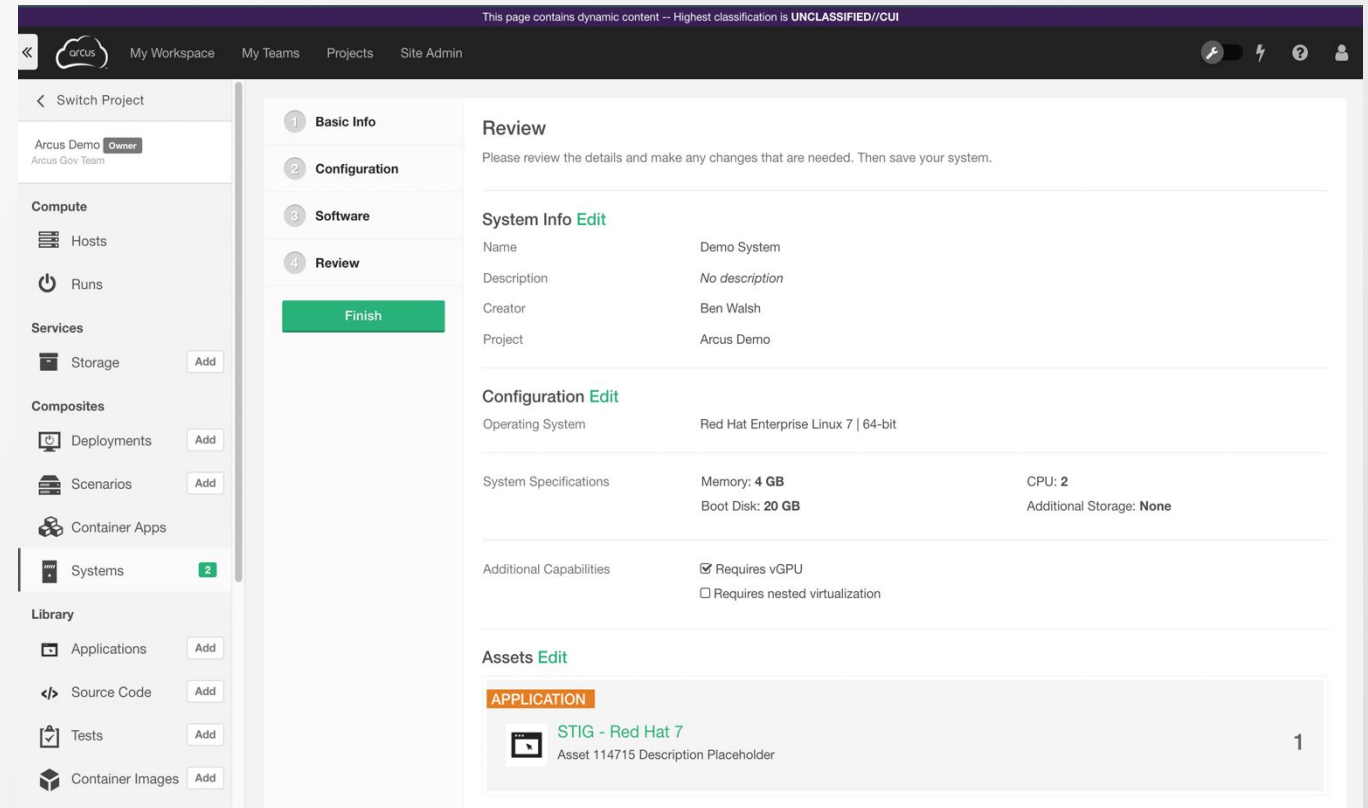
- Select Software Assets and/or Container Images from the Library
- Change the load orders using the arrows or by dragging
- Select **optional** reboot for each Asset and set reboot delay
- The reboot delay is the time the System waits to reboot **AFTER** the Asset completes its install. This is more common on Windows Assets.

The screenshot displays the Arcus Systems management interface. The top navigation bar includes the Arcus logo, 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. A security notice at the top right states 'This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI'. The left sidebar shows a 'Switch Project' dropdown set to 'Arcus Demo' (Owner: Arcus Gov Team) and a menu with categories: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Add; Scenarios, Add; Container Apps), and Library (Applications, Add; Source Code, Add; Tests, Add; Container Images, Add). The 'Systems' item in the sidebar is highlighted with a '2' badge. The main content area is titled 'Install Assets' and includes a progress indicator with steps: 1. Basic Info, 2. Configuration, 3. Software, and 4. Review. The 'Software' step is active. The configuration area shows a table with one asset: 'STIG - Red Hat 7' (Asset 114715) with a description placeholder. Below the table is a checkbox for 'Reboot system after installation?'. At the bottom, there are 'Back' and 'Next' buttons, and a dashed box containing '+ Add containers...' and '+ Add software...'.



# Systems: Review

- Review the Basic Info, Configuration, and Software sections
- Click **Edit** to make changes
- Finish will save the System and empty the Builder



The screenshot displays the Arcus Systems Review interface. At the top, a purple header bar contains the Arcus logo and navigation links: My Workspace, My Teams, Projects, and Site Admin. A security notice reads: "This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI".

The main content area is divided into a left sidebar and a main review panel. The sidebar, titled "Switch Project", shows the current project as "Arcus Demo" with the user role "Owner". Below this, it lists various system components with "Add" buttons: Compute (Hosts, Runs), Services (Storage), Composites (Deployments, Scenarios), Container Apps, and Systems (highlighted with a green badge and the number 2). The Library section includes Applications, Source Code, Tests, and Container Images, each with an "Add" button.


The main review panel is titled "Review" and contains a "Finish" button. It is organized into four sections:

- Basic Info:** A list of system details.

Name	Demo System
Description	No description
Creator	Ben Walsh
Project	Arcus Demo
- Configuration:** Details about the operating system.

Operating System	Red Hat Enterprise Linux 7   64-bit	
------------------	-------------------------------------	--
- System Specifications:** Hardware requirements.

Memory	4 GB	CPU	2
Boot Disk	20 GB	Additional Storage	None
- Additional Capabilities:** Checkboxes for "Requires vGPU" (checked) and "Requires nested virtualization" (unchecked).
- Assets:** A table listing system assets.

APPLICATION	
 STIG - Red Hat 7	1
Asset 114715 Description Placeholder	





# **Building a Scenario**

# Scenarios: What is a Scenario?

- A **Scenario** is a design consisting of multiple interconnected **Systems** with a build order.
- Common examples include:
  - Kubernetes stacks with Master and Worker nodes



# Scenarios: Components

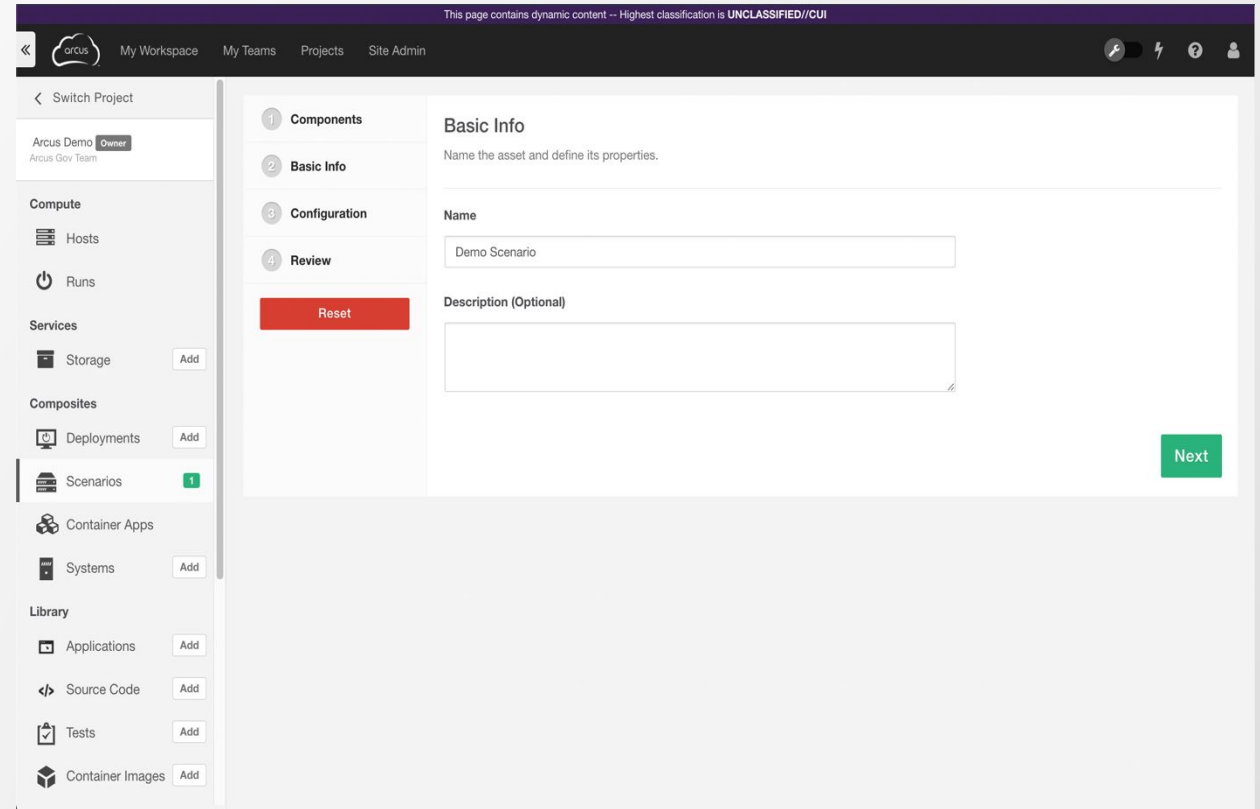
- Select Systems from the Library
- Change the load orders using the arrows or by dragging
- Assign a **System Role** name to each System
- The **System Role** will be used to identify the Systems in a Scenario to each other and in Software Assets for configuration
- Chose for each System to be built **with previous** (in parallel) or **after previous** (serially)
- Designate a **master** System in the Scenario
- The **master** System runs any Scenario configuration scripts

The screenshot displays the Arcus web interface for configuring a scenario. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area is titled 'Select Components' and includes a 'Reset' button. A sidebar on the left lists various components like 'Compute', 'Services', 'Composites', 'Library', etc. The main configuration area shows a 'VIRTUAL HOST' named 'host1' with a 'Demo System' designated as 'Master'. The 'System Role' is set to 'host1', and the 'Build' option is set to 'with previous'. A 'Designate as master' checkbox is checked. A '+ Add systems...' button is visible at the bottom of the configuration area, and a 'Next' button is in the bottom right corner.



# Scenarios: Basic Info

- Enter a **Name** for the Scenario
- Enter a **Description** (optional)



The screenshot displays the Arcus web interface for creating a scenario. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area is titled 'Switch Project' and shows the 'Arcus Demo' project. A sidebar on the left lists various categories: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Add), Scenarios (1), Container Apps, Systems (Add), Library (Applications, Add; Source Code, Add; Tests, Add; Container Images, Add). The 'Basic Info' form is active, with a 'Name' field containing 'Demo Scenario' and a 'Description (Optional)' field. A 'Reset' button is visible, and a 'Next' button is at the bottom right.

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

< Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

Compute

- Hosts
- Runs

Services

- Storage **Add**

Composites

- Deployments **Add**
- Scenarios **1**
- Container Apps
- Systems **Add**

Library

- Applications **Add**
- Source Code **Add**
- Tests **Add**
- Container Images **Add**

1 Components

2 Basic Info

3 Configuration

4 Review

**Reset**

**Basic Info**

Name the asset and define its properties.

**Name**

Demo Scenario

**Description (Optional)**

**Next**



# Scenarios: Configuration

- Set optional scripts:
  - Configure Scenario Master
  - Teardown Scenario Master
  - Configure Scenario Host
  - Teardown Scenario Host
- The **Scenario Master** scripts run on the designated master
- The **Scenario Host** scripts are specific to that host
- **Configure** scripts are executed immediately after all Assets have completed
- **Teardown** scripts are executed when the Run is released

The screenshot shows the Arcus Configuration interface. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area is titled 'Configuration' and contains a list of configuration items for a scenario. The items are: 'Configure Scenario Master' (Set), 'Teardown Scenario Master' (Set), a 'VIRTUAL HOST' section with 'Demo System' (Master) and 'host1' (1), 'Configure Scenario Host' (Set), and 'Teardown Scenario Host' (Set). A 'Reset' button is visible on the left side of the configuration area. The bottom of the interface has 'Back' and 'Next' buttons.

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

< Switch Project

Arcus Demo Owner  
Arcus Gov Team

Compute

- Hosts
- Runs

Services

- Storage Add

Composites

- Deployments Add
- Scenarios 1
- Container Apps

Library

- Applications Add
- Source Code Add
- Tests Add
- Container Images Add

1 Components

2 Basic Info

3 Configuration

4 Review

Reset

Configuration

Add configuration scripts to hosts in the scenario.

Configure Scenario Master  
Set

Teardown Scenario Master  
Set

VIRTUAL HOST

Demo System Master

host1

1

Configure Scenario Host  
Set

Teardown Scenario Host  
Set

Back

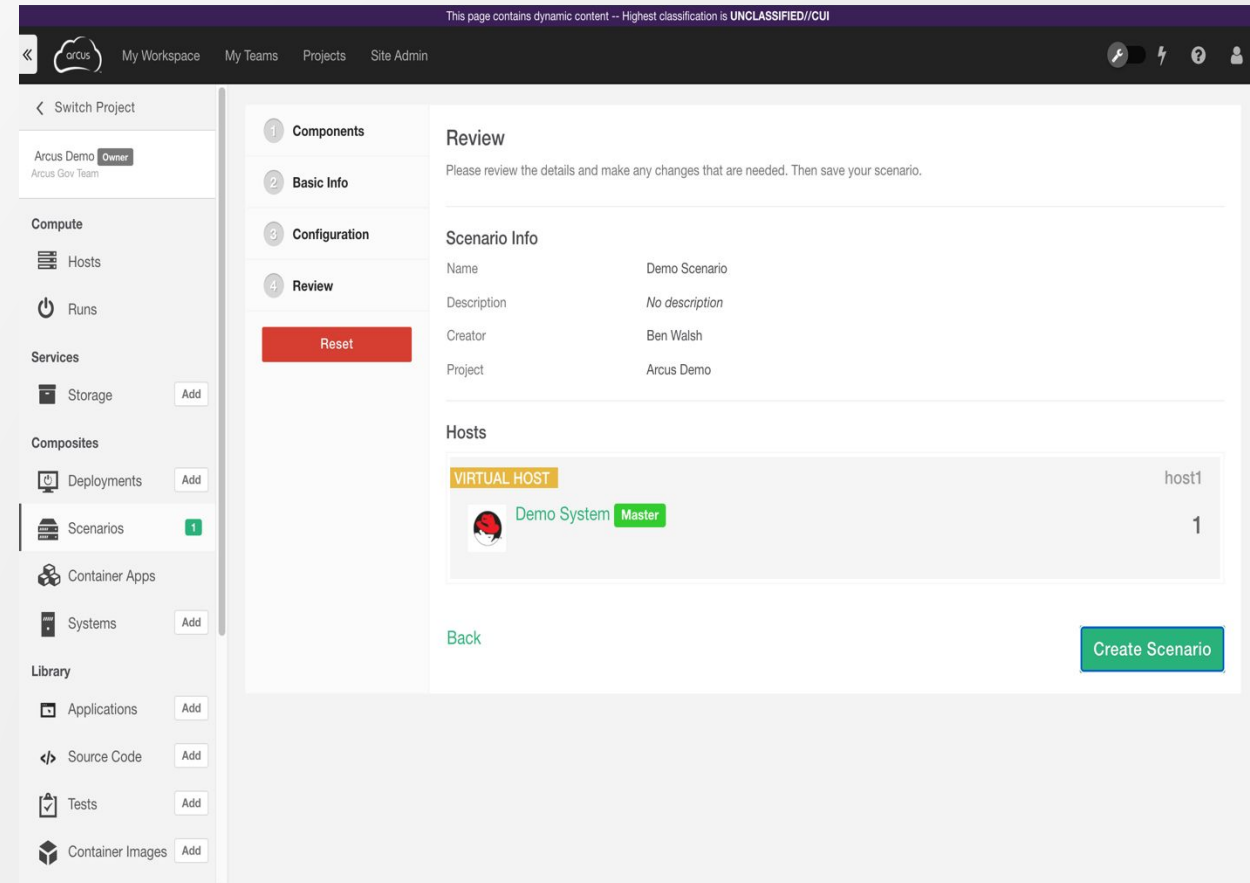
Next





# Scenarios: Review

- Review the Scenario Info, Configuration, and System (Hosts) selection
- Go [Back](#) to make changes
- Click [Reset](#) to empty the Builder
- [Create Scenario](#) will save the Scenario and empty the Builder



The screenshot shows the Arcus web interface for reviewing a scenario. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. A security notice at the top right states 'This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI'. The left sidebar contains a 'Switch Project' dropdown set to 'Arcus Demo' (owned by 'Arcus Gov Team') and a list of categories: Compute (Hosts, Runs), Services (Storage), Composites (Deployments, Scenarios), Container Apps, Library (Applications, Source Code, Tests, Container Images), and Systems. The 'Scenarios' category is highlighted with a green badge showing '1'. The main content area is titled 'Review' and contains a 'Reset' button, a 'Scenario Info' table, and a 'Hosts' table. The 'Scenario Info' table lists Name (Demo Scenario), Description (No description), Creator (Ben Walsh), and Project (Arcus Demo). The 'Hosts' table shows a 'VIRTUAL HOST' named 'host1' with a 'Demo System' (Master) component.

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

My Workspace My Teams Projects Site Admin

Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

Compute

- Hosts
- Runs

Services

- Storage [Add](#)

Composites

- Deployments [Add](#)
- Scenarios** [1](#)

Container Apps

Library

- Applications [Add](#)
- Source Code [Add](#)
- Tests [Add](#)
- Container Images [Add](#)

Systems

[Reset](#)

## Review

Please review the details and make any changes that are needed. Then save your scenario.

### Scenario Info

Name	Demo Scenario
Description	No description
Creator	Ben Walsh
Project	Arcus Demo

### Hosts

<b>VIRTUAL HOST</b>	host1
Demo System <b>Master</b>	1

[Back](#) [Create Scenario](#)



# Scenarios: Publish

- Creates a **Composition**
- For consumption in the Express User Interface

The screenshot displays the Arcus user interface for managing a scenario. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area shows the 'Demo Scenario' page, which includes a 'Publish' button circled in blue. The page also features a 'Launch' button, an 'Add to Deployment Builder' button, and a 'Clone' button. The scenario details include a star icon, the name 'Demo Scenario', the author 'SCENARIO by Ben Walsh - Apr 26', and '0 stars'. The 'About' section shows 'No description'. A table lists the resources: 1 SERVER, 2 CPU, 4 GB MEMORY, and 20 GB STORAGE. The 'Systems & Services' section shows a 'host1 Virtual Host' with 'Demo System Master' and '2 CPU 4 GB'. The 'Build Sequence' section lists two steps: '1 Build host1' and '2 Run master scenario configuration script on host1 (optional)'. The right sidebar contains metadata such as STATE (In Development), ONLINE (checked), PROJECT (Arcus Demo), OWNER (Ben Walsh), WHO HAS ACCESS (Not shared), RESTRICTION (None), and CLOUD IMPACT LEVEL.



# Scenarios: Compositions

## Basic Info:

- Select a Cloudspace
- Enter a **Name**
- Enter a **Description** (optional)

## Virtual Hosts:

- Option to resize RAM and CPU

## Properties:

- Enter properties as key value pairs  
(name=value)

The screenshot displays the Arcus console interface for configuring a scenario. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The left sidebar shows a 'Switch Project' dropdown set to 'Arcus Demo' (Arcus Gov Team) and a menu with categories: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Scenarios, Add), Container Apps, Systems, and Library (Applications, Source Code, Tests, Container Images, Add). The main content area is titled 'Demo Windows 10 Scen' and contains the following configuration fields:

- Cloudspace:** A dropdown menu with 'Arcus Demo' selected.
- Name:** A text input field containing 'Demo Composition'.
- Description:** A text area with '(optional)' as a placeholder.
- Done:** A green button to save the configuration.
- Virtual Hosts:** A section showing 'host1' (Master) with 'Windows 10 | 64-bit' as the image.
- Custom Properties:** A section with the text 'Additional key-value pairs that will be available during runtime.'





# Building a Deployment

# Deployments: What is a Deployment?

- A **Deployment** consists of a customized Scenario or multiple Scenarios with optional automated testing or security scanning.



# Deployments: Components

- The best practice is to always build up to Deployment
- Deployments have more history, logging, debugging, etc.
- Select Scenario(s) from the Library
- Select a Test Case (optional) from the Asset Library

The screenshot displays the Arcus deployment interface. At the top, a navigation bar includes the Arcus logo, 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. A status bar at the top right indicates 'This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI'. The main interface is divided into three sections:

- Left Panel:** A sidebar with a 'Switch Project' dropdown (currently showing 'Arcus Demo' and 'Arcus Gov Team'). Below this are categories: 'Compute' (Hosts, Runs), 'Services' (Storage), 'Composites' (Deployments, Scenarios, Container Apps, Systems), and 'Library' (Applications, Source Code, Tests). Each item has an 'Add' button.
- Center Panel:** A vertical navigation menu with steps: 1. Components, 2. Basic Info, 3. Properties, and 4. Review. A red 'Reset' button is located below the 'Review' step.
- Right Panel:** Titled 'Select Components', it contains a 'SCENARIO' section with a '201 Demo' card. Below the card is a 'Build:' section with radio buttons for 'with previous' and 'after previous'. At the bottom right is a green 'Next' button.



# Deployments: Basic Info

- Enter a **Name** for the Deployment
- Enter a **Description** (optional)

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

My Workspace My Teams Projects Site Admin

Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

Compute

- Hosts
- Runs

Services

- Storage **Add**

Composites

- Deployments** **2**
- Scenarios **Add**
- Container Apps
- Systems **Add**

Library

- Applications **Add**
- Source Code **Add**
- Tests **Add**
- Container Images **Add**

1 Components

2 **Basic Info**

3 Properties

4 Review

**Review**

**Reset**

Basic Info

Name the asset and define its properties.

**Name**

Demo Deployment

**Description (Optional)**

Back

**Next**



# Deployments: Properties

- Enter properties as key value pairs  
(name=value)
- These user defined properties get added to the `deployment.properties` files along with the standard properties
- The role name (defined in the Scenario) maps properties to a specific System
- Properties are defined in the Software Assets
- Review the Help tab on Assets for information on required properties

The screenshot displays the Arcus web interface for configuring deployment properties. The top navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. The main content area is titled 'Custom Properties' and contains a text input field with the value 'key=value'. A character count of '2048 characters left' is visible in the top right corner of the input field. Below the input field are 'Review' and 'Reset' buttons. A 'Back' link is located at the bottom left, and a 'Next' button is at the bottom right. The left sidebar shows a navigation menu with categories like 'Compute', 'Services', 'Composites', and 'Library', with 'Deployments' currently selected and showing a count of 2.





# Deployments: Review

- Review the Deployment Info, Hosts and Properties selection
- Go **Back** to make changes
- Click **Reset** to empty the Builder
- Clicking **Finish** will save the Deployment and empty the Builder

The screenshot shows the 'Review' stage of a deployment process in the Arcus platform. The interface is divided into a left sidebar and a main content area. The sidebar contains navigation options: 'Switch Project', 'Arcus Demo' (Owner), 'Compute' (Hosts, Runs), 'Services' (Storage), 'Composites' (Deployments, Scenarios, Container Apps, Systems), and 'Library' (Applications, Source Code, Tests, Container Images). The main content area is titled 'Review' and includes a 'Deployment Info' table, a 'Hosts' section for 'host1' (Master), and 'Tests' and 'Properties' sections. The 'Deployment Info' table lists Name, Description, Creator, and Project. The 'Hosts' section shows 'host1' with 2 CPU, 4 GB MEMORY, and 0 disks. The 'Tests' section shows 'Nessus ETT Testing v2' with a 'Deployment Run On Demand' status. The 'Properties' section indicates no custom properties are defined. At the bottom right, there are 'Back', 'Finish', and 'Finish & Launch' buttons.

This page contains dynamic content -- Highest classification is UNCLASSIFIED//CUI

arcus My Workspace My Teams Projects Site Admin

< Switch Project

Arcus Demo **Owner**  
Arcus Gov Team

Compute

- Hosts
- Runs

Services

- Storage **Add**

Composites

- Deployments **2**
- Scenarios **Add**
- Container Apps
- Systems **Add**

Library

- Applications **Add**
- Source Code **Add**
- Tests **Add**
- Container Images **Add**

**1** Components

**2** Basic Info

**3** Properties

**4** Review

**Finish**

**Reset**

## Review

Please review the details and make any changes that are needed. Then save your deployment.

### Deployment Info

Name	Demo Deployment
Description	No description
Creator	Benjamin Walsh
Project	Arcus Asset Development

### Hosts

host1 **Master**  
Red Hat Enterprise Linux 7 | 64-bit Virtual Host

2 CPU	4 GB MEMORY	-- STORAGE
-------	-------------	------------

0 disks

SOFTWARE

Nessus ETT Testing v2  
Nessus Test  
Deployment Run On Demand  
Asset 38936 Description Placeholder

### Tests

### Properties

There are no custom properties defined.

**Back** **Finish** **Finish & Launch**





# **Launching Deployment Runs**

# Launching DRs:

- Users can choose to launch a System, Scenario or Deployment Asset from the Library
- This is called a **Run**
- There are three steps to configure/confirm a Run for launch:
  - Base Settings
  - Resources
  - Properties

The screenshot displays the Arcus platform interface. At the top, a navigation bar includes 'My Workspace', 'My Teams', 'Projects', and 'Site Admin'. A sidebar on the left lists various categories: Compute (Hosts, Runs), Services (Storage, Add), Composites (Deployments, Add; Scenarios, Add), Container Apps, and Systems (Add). The main content area shows the configuration for a 'Demo System' (VIRTUAL HOST by Ben Walsh - Apr 26, 0 stars). It features a 'Launch' button, 'Add to Scenario Builder', and 'Clone' options. The 'About' section includes 'Operating System: Red Hat Enterprise Linux 7 | 64-bit'. The 'System Specifications' section lists 'Memory: 4 GB', 'CPU: 2', 'Boot Disk: 20 GB', and 'Additional Storage: None'. The 'Additional Capabilities' section shows 'Requires vGPU' checked and 'Requires nested virtualization' unchecked. The 'Components' section lists 'STIG - Red Hat 7' (Asset 114715 Description Placeholder) with a count of 1. A right-hand sidebar displays system state: 'In Development', 'ONLINE' (checked), 'PROJECT: Arcus Demo', 'OWNER: Ben Walsh', 'WHO HAS ACCESS: Not shared', 'RESTRICTION: None', and 'CLOUD IMPACT LEVEL: No Data Impact Level'.



# Launching: Base Settings Pt.1

- Select the target *Cloudspace* to launch the Run into
- Give the Run a name and (optionally) a description
- Define the default user credentials for remote access
  - Note: the password complexity must meet the base OS requirements

**1 Base Settings**  
IN PROGRESS

**2 Resources**  
PENDING

**3 Properties**  
PENDING

## Base Settings

Define the name, schedule the deployment run, and configure options.

Cloudspace  
Asset Development

Name

Description  
(optional)

### Credentials

An **administrative** user account with the specified credentials will be created on each host in the deployment run.

*Note: If the operating system template specifies password criteria that are not satisfied, the host may fail to provision. Please see notes attached to the selected operating system template for additional information or limitations.*

Username  
DemoMan

Password

Confirm password

### Windows Domain

If a Windows Domain Controller is deployed into the Cloudspace, you may provide the domain name. This will be used when pre-configuring Remote Desktop connections to the deployed hosts.



# Launching: Base Settings Pt.2

## ■ Scheduling

- The Run can be scheduled to execute immediately, or at a determined date and time.
- *Time to live* will automatically release the Run after the specified time
- The *Recurring Schedule* allows for planning a set number of repeating Runs


## ■ Options


- *Automatically release deployment resources* will shutdown and release runs after testing completes
- *Retain the deployment on error* will keep an errored run alive for debugging
- *Deployment run lock* will prevent anyone other than the original creator or the Project Manager from releasing the run

## ■ Automated Power Management

- *Power schedules* can be configured to power off systems at given times, cutting down on cost and conserving resources.

### Scheduling

 **Schedule now**  
Your run will be started as soon as resources are available.

 **Schedule later**  
You can change the earliest start time of your run.

Time to live  Off

---

### Options

**Run options**  
If selected, systems will be shutdown and deleted as soon as they are provisioned and any included tests are completed.

Automatically release deployment resources

**Error handling**  
If selected, systems will remain available for debugging. The requester will have to manually release the deployment run to free its resources.

Retain the deployment on error

**Deployment run lock**  
Locked deployment runs cannot be released or canceled while locked. This setting can be changed later.

Off

**Automated Power Management**  
Automatically power off and power on deployed virtual systems for cost and energy savings.

No power schedule set for this run.  
[Set one now?](#)

[Cancel](#)

[Next](#)

# Launching: Resources

- System Specifications
  - Users may edit the resources assigned to this Deployment Run
    - RAM
    - CPU
    - Storage
- Networking
  - Users can edit the networking configuration for the Run
- Additional Capabilities
  - For Runs with vGPUs enabled, the template or instance type (cloud-dependent) must be specified
- Note: Any changes made here will only apply to this Run

**Configure Resources**  
Manage the virtualization resources in this run.

**host1 Master**  
Red Hat Enterprise Linux 7 | 64-bit

Operating System Template: Red Hat 7  
Red Hat Enterprise Linux 7 Features Remote Access available via SSH and VNC. For access to updates, include the RHN Repo asset in your system design CONS3RT Agent CONS3RT Agent components located in '/opt/cons3rt-agent'. Every template contains a cons3rt-agent which is used for the deployment process. Once the deployment has gone to reserved, the agent can be disabled or removed.

System Specifications: Memory: **4 GB** CPU: **2**  
Boot Disk: **20 GB** Additional Storage: **None**

Networking: 2 network interfaces

Additional Capabilities: GPU Profile: **grid\_m10-0q**  
 Requires nested virtualization

SOFTWARE

[Back](#) [Next](#)



# Launching: Properties

- Deployment Properties are used in Assets for configuration and set-up
- Not all Assets will require properties
- In practice, if the user has not reviewed the Asset readme, the Properties field can be left blank

1 Base Settings  
COMPLETE

2 Resources  
COMPLETE

3 Properties  
IN PROGRESS

### Custom Properties

Additional key-value pairs that will be available during runtime.

Properties 2048 characters left

key=value

Back Submit





# Remote Access



# RA: Basic Features

- Web browser-based to deployed Systems through RDP, VNC, and/or SSH
- Multiple methods of File Transfer
- Clipboard to/from local machine
- Click the *Connect* button on a deployed system
  - A **standard** connection will use the credentials set on the System at launch time
  - A **custom** connection will allow the user to enter different credentials
  - A session can be shared to other members of the Project by filling in their username when the connection is opened
- The remote session opens in a new tab/window
- The 4 icons to the right of the connection options depict file upload, download, copy, and paste
  - If any of these icons are greyed out, that capability has been restricted in your Project by your Team Manager
- ***A browser pop-up blocker will prevent a connection tab from opening***

Connect to host1

My Connections

New Connection

SSH Remote Access  
Connect to remote machine as sethadm

VNC Remote Access  
Connect to remote machine as sethadm

Custom Connection  
Select connection type and provide the **remote** system credentials to use for connecting. Some remote access configurations will fail to establish a connection if invalid credentials are provided.

Connection:

Username:

Password:

Low-bandwidth mode

Share this session:



# RA: Additional Features

- **Additional features:**

- Clipboard to/from local machine
- Copy/Paste from local machine
- Virtual keyboard
- File transfer
- Zoom

- **How to access Remote Session Menu:**

- Open a Remote Access connection
- Hold down the the CTL and ALT keys then press the SHIFT key to toggle the menu
- Use the clipboard to pass data in & out of the remote session
- Use the Devices icon to transfer files
- The file transfer feature is designed for smaller files. For large files or data sets, use an Asset.
- Note: Basic text copy/paste can be achieved without using the Remote Session Menu

The screenshot shows the 'Run 61313 wordpress - SSH Remote Access' interface. At the top right, it displays the time '12:52:44 2017' and the IP address 'from 172.16.10.253'. The interface is divided into several sections:

- Clipboard:** A text area for copying and pasting text between the local and remote machines.
- Devices:** A section with a keyboard icon and a slash, likely for file transfer.
- Input method:** A list of options: 'None' (selected), 'Text input' (with a keyboard icon), and 'On-screen keyboard'.
- Mouse emulation mode:** Two options with diagrams: 'Tap to click' and 'Drag to move the mouse pointer and tap to click'.
- Display:** A zoom control showing '100%' with minus and plus buttons, and a checked box for 'Automatically fit to browser window'.



# RA: CAC Pass-Through

- CAC Pass-Through allows users to use their CAC in an Arcus remote access session
- Use CAC Pass-Through by clicking “connect” on the desired host
  - Select *Using a Remote Desktop Client*.
  - Click this button to download an RDP file, which will open a remote access session in a new tab/window on your local machine
- By default, RDP session files are valid for 60 minutes
- CAC Pass-Through is enabled at the Team level by a Team Manager

**CAC Pass-Through Testing**  
RUN 148861 of CAC Pass-Through Testing

[Rerun](#) [Publish](#) [Off](#)

[Overview](#) [Activity Log](#) [Test Results](#)

About

No description

SERVERS	CPU	MEMORY	STORAGE
1	2	4 GB	100 GB

Status 45:40

Queued Submitted Deployed Available Released

**REMOTE DESKTOP CLIENT ACCESS**

SmartCard pass-through to remote hosts is only available using a native Remote Desktop client. Enabling Remote Desktop client access provides users with any connected SmartCards on their deployed system.

Enabled

Remote Desktop Session Duration

120 minutes

Each user connection to a remote host will be limited to this duration.

[Save changes](#)





# **Support & Troubleshooting**

# Support

## Support

- <https://arcus.mil/support>
- Submit a ticket through...
  - the *Support* link on the home page
  - the *Help* icon when signed in
- Help icon tickets provide more data on what the user was working on

## Email

- [support@arcus-cloud.io](mailto:support@arcus-cloud.io)

## Knowledge Base

- <https://arcus.mil/kb/>
- The Knowledge Base expands on all the topics covered in this training.

## Github Sample Assets

- <https://github.com/cons3rt>

Support Pricing Blog

arcus

SIGN IN REGISTER

## Support

### Training

Getting Started Video Guides

Knowledge Base

Change Log

Getting Help

More Resources

There are a variety of ways to get help using CONS3RT. If you are new to the site, be sure to check out the resources below:

### Training

We have four training programs for beginner, intermediate, and advanced users listed below. Please contact Jackpine Technologies through the "Support" button below to arrange a custom training program.

- Overview (for Beginners) PDF
- Power Users (for Intermediate to Advanced users) PDF
- Getting Started (for Beginners) PDF
- Asset Development (for Intermediate to Advanced users) PDF

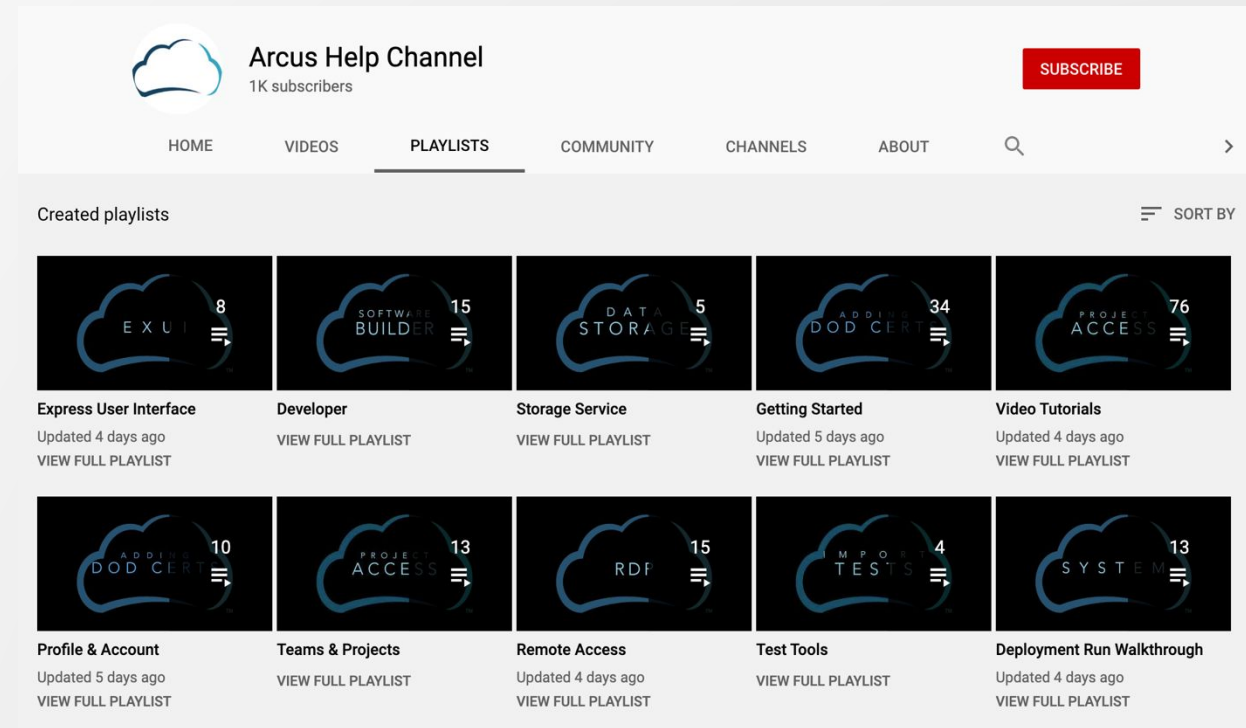
### Getting Started Video Guides

Listed below are our YouTube playlists for video tutorials on getting started with CONS3RT. In addition, We have established a **CONS3RT repository** to provide users with several source code and software asset samples available for download.



# Video Tutorials

- If you would like to see **Arcus** in action, feel free to check out the video tutorials:
  - On the Arcus Help Channel at <https://www.youtube.com/c/arcushelpchannel>
  - Embedded in the articles on our [Help Site](#)
- If you have any suggestions for future videos, let us know by submitting a ticket



The screenshot shows the YouTube channel page for 'Arcus Help Channel', which has 1K subscribers. The 'PLAYLISTS' tab is selected, displaying a grid of 10 video playlists. Each playlist card includes a thumbnail with a cloud icon and text, the number of videos in the playlist, the playlist title, the last update time, and a 'VIEW FULL PLAYLIST' link.

Playlist Title	Number of Videos	Last Updated
Express User Interface	8	Updated 4 days ago
Developer	15	Updated 4 days ago
Storage Service	5	Updated 4 days ago
Getting Started	34	Updated 5 days ago
Video Tutorials	76	Updated 4 days ago
Profile & Account	10	Updated 5 days ago
Teams & Projects	13	Updated 4 days ago
Remote Access	15	Updated 4 days ago
Test Tools	4	Updated 4 days ago
Deployment Run Walkthrough	13	Updated 4 days ago







TM