Feature Design Candidate: Per-org limits

Status: Investigating
Sponsor User: IBM

Date of Submission: 10 Mar 2023

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Affiliation(s): IBM

<Please fill out the above fields, and the Overview, Design and User Experience sections below for an initial review of the proposed feature.>

Scope and Signoff: (to be filled out by Chair)

Overview

Some tenant organizations are small groups that want to keep that size small (and throw an error if someone tries to exceed those limits). For example, a small project wants to limit the number of active users in their org to five persons or fewer. Another organization may want to impose a limit on the number of devices or agents a user or all users may be able to register as a way of ensuring performance on a hub hosted on a system with constrained resources in order to ensure specific performance KPIs. Let's see if we can determine the best way to specify these limits in configuration, enforce the limits, and decide how to best communicate when an action is denied because those limits would be exceeded (throw an error, notify an administrator, ...).

Design

<Describe how the problem is fixed. Include all affected components. Include diagrams for clarity. This should be the longest section in the document. Use the sections below to call out specifics related to each aspect of the overall system, and refer back to this section for context. Provide links to any relevant external information.>

User Experience

<Describe which user roles are related to the problem AND the solution, e.g. admin, deployer, node owner, etc. If you need to define a new role in your design, make that very clear. Remember this is about what a user is thinking when interacting with the system before and after this design change. This section is not about a UI, it's more abstract than that. This section should explain all the aspects of the proposed feature that will surface to users.>

Command Line Interface

<Describe any changes to the hzn CLI, including before and after command examples for clarity. Include which users will use the changed CLI. This section should flow very naturally from the User Experience section.>

External Components

<Describe any new or changed interactions with components that are not the agent or the management hub.>

Affected Components

<List all of the internal components (agent, MMS, Exchange, etc) which need to be updated to support the proposed feature. Include a link to the github epic for this feature (and the epic should contain the github issues for each component).>

Security

<Describe any related security aspects of the solution. Think about security of components interacting with each other, users interacting with the system, components interacting with external systems, permissions of users or components>

APIs

<Describe and new/changed/deprecated APIs, including before and after snippets for clarity. Include which components or users will use the APIs.>

Build, Install, Packaging

<Describe any changes to the way any component of the system is built (e.g. agent packages, containers, etc), installed (operators, manual install, batch install, SDO), configured, and deployed (consider the hub and edge nodes).>

Documentation Notes

<Describe the aspects of documentation that will be new/changed/updated. Be sure to indicate if this is new or changed doc, the impacted artifacts (e.g. technical doc, website, etc) and links to the related doc issue(s) in github.>

Test

<Summarize new automated tests that need to be added in support of this feature, and describe any special test requirements that you can foresee.>