IMC Supervisor Bulk Discovery CSV File Format Changes

Contents

Introduction

This document describes the significant changes to comma separated value (csv) file format used in the Discovery Profile. The changes were made to make it more flexible and robust for the customers to provide the parameters for the rack servers. Also, the intention is to cover all the formats and the frequent errors in the format encountered in the field.

Background Information

Cisco Integrated Management Controller Supervisor (IMCS) is a management software with robust functionalities which manages rack servers. Users have the ability to discover, inventory, run firmware upgrade and perform multiple other operations. The discovery of the rack servers can be performed with the creation of a Discovery Profile with the list of IP addresses to be discovered. The IP addresses can be provided as list of IPs, IP range, Subnet or with the use of a csv file. The format changes mentioned in this document is with respect to this csv file.

Problem

Prior to IMCS 2.0.0.2

The csv file format prior to IMCS 2.0.0.2 (i.e. 2.0.0.1 and lesser) contained only IP addresses. These IP addresses were provided in every row as shown in the table here.

	A	B
1	209.165.201.1	
2	209.165.201.5	
3	209.165.201.13	
4	209.165.201.9	
5	209.165.201.27	
6		

Invalid format:

Users at times enter the IP addresses column wise as shown here.

	A	B	C	D	E
1	209.165.201.1	209.165.201.5	209.165.201.13	209.165.201.9	209.165.201.27
2					

IMCS 2.0.0.2 to IMCS 2.1.0.2

The format changed to key-value pairs and supported more values to be provided as part of the csv file. Also, added the flexibility to provide the entries in any sequence (i.e. there is no strict constraint to provide the entries in a specific column). For example, the Contact information can be provided before or after the IP address. The keys are IP, Description, Location, Contact, Tags, Rack Group.

Note: The omitted key-value pairs need not be provided.

For example, if Description is not available for a server, the csv file need not have the entry **Description=** to indicate that the value is empty. The first row in the screenshot here is an example of this use case.

	A	B	C	D	E
1	IP=10.105.219.123	Location=Location	Contact=Contact	tags=TC:TC;	
2	IP=10.105.219.124	Description=10.105.219.124	Location=Location	Contact=Contact	Rack Group=Meg
3	IP=10.105.219.66	Description=10.105.219.66	Location=Location	Rack Group=Meg	

Constraint:

The Key(s) needs to be provided in all the rows of the csv file.

Invalid format:

Given here are a few invalid formats encountered in the field.

- Provision of all the keys:

The keys which do not have values are provided in the csv file which causes an exception and result in the discovery to not happen. In the screenshot here, the keys Rack Group and Tags are provided although there is no value provided for them.

	A	B	C	D	E	F
1	IP=10.28.106.136	Description= desc	Location=loca	Contact=contacter	Rack Group=	Tags=
2	IP=10.28.106.137	Description= desc	Location=loca	Contact=contacter	Rack Group=	tags=

- Provision of the keys as headers and values as column entries:

The keys are provided as headers and the values as column entries as shown here. This causes the error that no IP is available in the first row which results in no creation of the discovery profile.

IP=	Description=	Location=	Contact=	Rack Group=	Tags=
10.28.106.137	desc	loca	contacter	RGroup2	T1:X1

Solution

IMCS 2.2.0.0

Henceforth, the csv file format is comma separated values as shown here. The columns are the IP address, Description, Location, Contact, Rack Group and Tags. You can opt to omit to provide the values for entries which are not available/known at the time of the creation of the Discovery Profile.

The entries which are not provided are left empty as shown in the screenshot here. However, the IP address field is mandatory.

Multiple tag values can be provided with semi-colon delimited values as shown in the screenshot here.

In the screenshot, there are 2 tags (TagX and TagY) and the value of each tag associated to the rack server is ValueX and ValueY respectively. Also, the contact column can be any string value i.e. it can contain email id, phone number or any other string value.

Some sample entries are shown in the screenshot here.

1	10.105.219.123	Description1	BGLocation-10	abc@abc.com	Colusa2_Rack_Group	TagX:ValueX;TagY:Value'
2	10.105.219.124		BGLocation-11		Colusa2	
3	10.105.219.66	Description2	BGLocation-12	abc@abc.com	Colusa2	
4	10.105.219.122			919-555-1212		TagX:ValueX;TagY:ValueY

Note: The older formats are not supported from release IMCS 2.2.0.0

Constraint:

Strict column restrictions. Each column should contain only that specific value.

Column-1	IP Address
Column-2	Description
Column-3	Location
Column-4	Contact
Column-5	Rack Group
Column-6	Tags

FAQs

(Q) What happens if user tries to give a csv with old format in IMCS 2.2?

(A) IMCS throws an error at the time of upload to indicate that the format is invalid.

(Q) Can description, location and tag values accept spaces?

(A) Yes. Spaces are accepted in the Description, Location and Tag values.

(Q) Can hostnames be given instead of IPs in the first column?

(A) Yes. Hostnames can be provided.

(Q) If rack group is not mentioned, what happens?

(A) If no rack group is specified, the rack server is added under Default Group rack group.

(Q) Should contact always be an email id? Can you give a phone number or other values?

(A) Yes, contact can be any value. IMCS accepts all string values.