



# Database Queries and Updates

## Access Card System

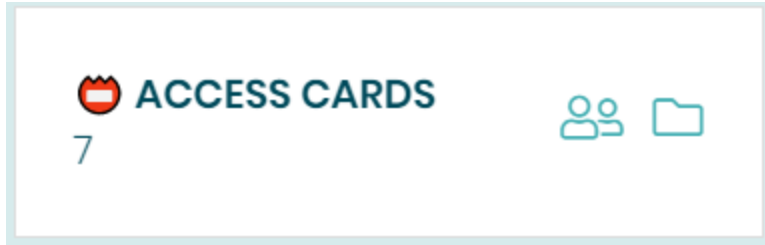
### Use Case Scenario


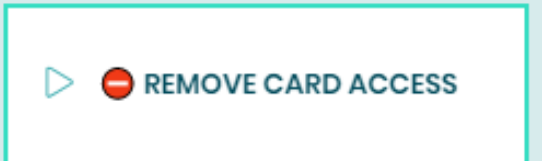

ACME Corporation's security department keeps all employees in an on-site database which allows employees access to buildings. This database is synchronized with an HR database. However, at times, an employee's access needs to be verified and revoked in the security department's database, independent of the HR database. This typically happens when a user's security card is lost.

Before Cimitra, the Security Department would often put a priority 1 emergency request into the IT department so that a Database Administrator (DBA) could remove the user immediately from the database. Until the DBA would do this, the security department personnel would be hounding the IT department to get the user record removed right away!

After Cimitra, personnel in the Security Department can remove user records without needing to involve the IT department for this very basic function. A BASH shell script called **employee.sh** was created and shared with authorized members of the Security Department.

NOTE: Since the **employee.sh** script [ [DOWNLOAD HERE](#) ] [ [CLICK HERE TO VIEW SCRIPT](#) ] requires a database to be in place, it won't just work right out of the box. This document is meant to expose you to the concepts of how a script can allow database queries and database updates. You can use the script as an end-user by logging into Cimitra's demo account and using the Cimitra Apps in the **Access Cards** folder.



Topic	Documentation
	<a href="#">Script Integration Into Cimitra</a>
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## Technical Overview

The **employee.sh** Bash script was created for the express purpose of querying and updating values in a MySQL database.

The **employee.sh** script has a few input parameters that we will explore three different example scenarios in this document.


## Bash Script Contents

Since the **employee.sh** script is long, it is not embedded in this document. You can [CLICK HERE \]](#) to view the contents of the **employee.sh** script

Create a new **Cimitra App** object and fill in the following properties as follows:

### SEARCH USERS - Script Integration Into Cimitra

#### CIMITRA APP PROPERTIES

Property	Value
Platform	<b>Linux</b>
Agent	<The Cimitra Agent deployed to the Linux Server that houses the <b>employee.sh</b> script>
Name	 <b>SEARCH USERS</b>  <b>NOTE: You can grab emoticons from the Internet and use them in almost any field in Cimitra. Cool!</b>
Interpreter	<b>/bin/bash</b>
Script/Command	<Path to the Cimitra Script>  Example:  <b>/home/tkratzer/scripts/employee.sh</b>
User Defined Switches/Parameters	Click the “ <b>+Add Switch</b> ” option. There will be two switches as shown below.

#### FIRST NAME SWITCH

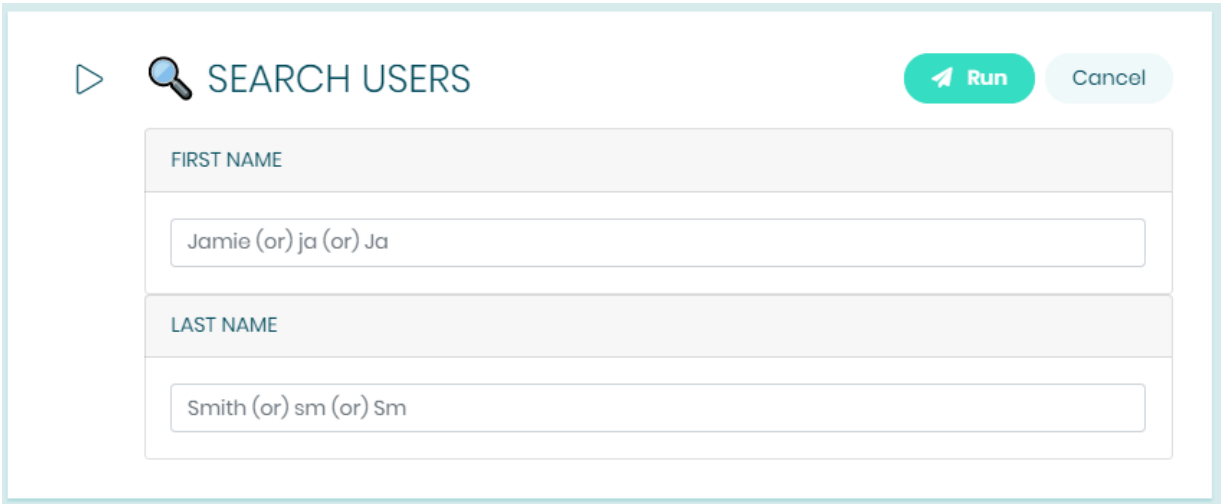
Flag:	<b>-f</b>
Parameter Name:	<b>FIRST NAME</b>

Validating Regex:	<b>/[a-zA-z]/gi</b>
Allow: Letters	
Example	<b>Jamie (or) ja (or) Ja</b>

**LAST NAME SWITCH**

Flag:	<LEAVE THIS FIELD BLANK>
Parameter Name:	<b>LAST NAME</b>
Validating Regex:	<b>/^[A-Za-z]+\$</b>
Allow: Letters	
Example:	<b>Smith (or) sm (or) Sm</b>

**CIMITRA APP - 🔍 SEARCH USERS - USER EXPERIENCE**



## ⊖ REMOVE CARD ACCESS - Script Integration Into Cimitra

### CIMITRA APP PROPERTIES

Property	Value
Platform	<b>Linux</b>
Agent	<The Cimitra Agent deployed to the Linux Server that houses the <b>employee.sh</b> script>
Name	⊖ <b>REMOVE CARD ACCESS</b>
Interpreter	<b>/bin/bash</b>
Script/Command	<Path to the Cimitra Script>  Example:  <b>/home/tkratzer/scripts/employee.sh</b>
Switches	<b>-d</b>
User Defined Switches/Parameters	Click the “ <b>+Add Switch</b> ” option. There will be one switch as shown below.

### EMPLOYEE NUMBER SWITCH

Flag:	<b>-r</b>
Parameter Name:	<b>EMPLOYEE NUMBER</b>
Validating Regex:	<b> /^[0-9]+\$ /</b>
Allow: Letters	
Example	<b>123456</b>

## CIMITRA APP - ⊖ REMOVE CARD ACCESS - USER EXPERIENCE

The screenshot shows a user interface for the 'REMOVE CARD ACCESS' app. At the top left is a play button icon. Next to it is a red circle with a white horizontal bar, followed by the text 'REMOVE CARD ACCESS'. On the top right, there are two buttons: a green 'Run' button with a white arrow and a grey 'Cancel' button. Below this header is a form with a grey header 'EMPLOYEE NUMBER'. Underneath is a text input field containing the number '123456'.

# EMP. # SEARCH - Script Integration Into Cimitra

### CIMITRA APP PROPERTIES

Property	Value
Platform	<b>Linux</b>
Agent	<The Cimitra Agent deployed to the Linux Server that houses the <b>employee.sh</b> script>
Name	# <b>EMP. # SEARCH</b>
Interpreter	<b>/bin/bash</b>
Script/Command	<Path to the Cimitra Script>  Example:  <b>/home/tkratzer/scripts/employee.sh</b>
Switches	<b>-s</b>
User Defined Switches/Parameters	Click the “ <b>+Add Switch</b> ” option. There will be one switch as shown below.

### EMPLOYEE NUMBER SWITCH

Flag:	-r
Parameter Name:	<b>EMPLOYEE NUMBER</b>
Validating Regex:	<b>/^[0-9]+\$</b>
Allow: Letters	
Example	<b>123456</b>

**CIMITRA APP - # EMP. # SEARCH - USER EXPERIENCE**

The screenshot shows a user interface for an application search. At the top left is a play button icon. Next to it is a blue square icon containing a white hash symbol (#), followed by the text "EMP. # SEARCH". To the right of this header are two buttons: a green "Run" button with a white arrow icon and a light gray "Cancel" button. Below the header is a search input area. The top part of this area is a light gray bar with the text "EMPLOYEE NUMBER". Below this bar is a white text input field with a thin gray border, containing the number "123456".