

Retrieving and Installing Updates Using the API

You can use the Automox REST API to programmatically retrieve and install updates. This article describes how to do this and references our [API Reference Guide](#).

Step 1 - Retrieve your API Key

The API key for your account is located on the **Settings > Keys** page of the console. For more information about API keys, see our User Guide: [Managing Keys](#).

Step 2 - Retrieve the list of packages for a device

Using the [servers/{id}/packages API endpoint](#) issue a call to retrieve the full list of installed and available packages (software and patches) for a device.

Endpoint:

```
https://console.automox.com/api/servers/{server_id}/packages?o={organization_id}
```

Parameters:

You can find the parameters for the `servers/{id}/packages` API call by navigating to the **Device Detail page** for the target device in question (for example, <https://console.automox.com/device-detail?s=68439&o=6>)

- **organization_id**: Is the `o=` parameter of the query string (`o=6` above)
- **server_id**: is the `s=` parameter of the query string (`s=68439` above)

Request:

```
curl -X GET --header 'Accept: application/json' 'https://console.automox.com/api/servers/68439/packages?o=6&api_key=YOUR_API_KEY'
```

Response:

This will return a JSON array of packages found and available for this device. You will want to filter this JSON response by looking for packages where the **installed** attribute is **false**, such as the following excerpt from a `servers/{id}/packages` response:

```
[
  {
    "id": 617664440,
    "server_id": 68439,
    "package_id": 214744671,
    "installed": false,
    "ignored": false,
    "deferred_until": null,
    "name": "org.mozilla.firefox",
    "display_name": "Firefox",
    "version": "56.0.1",
    "repo": "Installed",
    "package_type_name": "other",
    "group_ignored": false,
    "group_deferred_until": null,
    "cves": null,
    "cve_score": null,
    "severity": "other",
    "package_version_id": 215219918,
    "os_name": "OS X",
    "os_version": "10.12.6",
    "create_time": "2017-10-10T01:51:28+0000",
    "requires_reboot": false,
    "os_classification": null,
    "is_uninstallable": false
  }, ...
]
```

Step 3 - Issue the API request to install a package

Referring to the example response from Step 2, we will issue an API request to the [servers/{id}/queues API endpoint](#) to have the Firefox update installed on this device:

Endpoint:

```
https://console.automox.com/api/servers/{server_id}/queues?o={organization_id}&api_key=YOUR_API_KEY
```

Parameters:

You can find the parameters for the `servers/{id}/queues` API call by navigating to the Device Detail page for the target device in question (for example, `https://console.automox.com/device-detail?s=68439&o=6``)

- **organization_id:** Is the `o`= parameter of the query string (`o=6` above)
- **server_id:** is the `s`= parameter of the query string (`s=68439` above)

POST Data Parameters:

The following POST data parameters must be supplied in the request body as a JSON-formatted object:

- **command_type_name:** `["InstallUpdate" | "Reboot"]` - indicates the command you want to perform on the device. For this example, we use `"InstallUpdate"`.

args: ["org.mozilla.firefox" "com.google.Chrome"] - A space-delimited list of packages you want to have installed on the device. The package names are derived from the *name* attribute of the response JSON in Step 2. Don't forget to escape the quotes if you're specifying multiple packages.

POST Data Example:

```
{ "command_type_name": "InstallUpdate", "args": "org.mozilla.firefox" }
```

Request:

```
curl -X POST --header 'Content-Type: application/json' --header 'Accept: application/json' -d '{ "command_type_name": "InstallUpdate", "args": "org.mozilla.firefox" }' 'https://console.automox.com/api/servers/68439/queues?o=6&api_key=API_KEY'
```

Response:

A successful call to this API endpoint returns HTTP status code *201 - Created*.
