



# FastX API

For FastX 3.2

<b>FastX API</b>	<b>1</b>
<b>Introduction</b>	<b>11</b>
Authorization Token	11
HTTP HEADER	11
GET/POST	11
Error Object	11
<b>General</b>	<b>11</b>
/v3/api	12
Parameters	12
Result	12
/v3/api/config	12
<b>Auth</b>	<b>12</b>
SSH	12
/v3/api/auth/ssh	12
Basic Authentication	12
Parameters	12
Result	12
SSH State Machine Stage: "login"	13
Parameters	13
Result	13
Stage: banner	14

Stage: public-key	14
Stage: keyboard-interactive	14
Stage: password	14
Stage: success	14
SSH State Machine Stage: "banner"	14
Parameters	14
Result	14
SSH State Machine Stage: "keyboard-interactive"	15
Parameters	15
Result	15
SSH State Machine Stage: "password"	15
Parameters	15
Result	15
SSH State Machine Stage: "public-key"	15
Parameters	15
Result: Stage "sign"	16
Result: Stage "public-key"	16
Result: Others	16
SSH State Machine Stage: "sign"	16
Parameters	16
Result	16
<b>Config</b>	<b>16</b>
/v3/api/config/	16
Parameters	16
Result	17
/v3/api/config/session	17
/v3/api/config/shortcut	17
/v3/api/config/system	17
/v3/api/config/manage	17
<b>Server</b>	<b>17</b>
Server Object	17
/v3/api/server	17
Parameters	17
Result	18
/v3/api/server/list	18
<b>User</b>	<b>18</b>
/v3/api/user/me	18
Parameters	19

Result	19
DECRYPTED_JSON_WEBTOKEN_OBJECT	19
PERMISSIONS_OBJECT	19
/v3/api/user/logout	19
Parameters	19
Result	19
/v3/api/user/shutdown	19
Parameters	20
Result	20
/v3/api/user/keepalive	20
Parameters	20
Result	20
<b>Session</b>	<b>20</b>
/v3/api/session/start	20
Parameters	20
Keyboard Note	21
Result	21
Default result	21
Stage: form	21
If auth is set	21
If schedule is set	22
Error	22
/v3/api/session/start/bookmark	22
Parameters	22
Result	22
Error	23
/v3/api/session/connect	23
Parameters	23
Result	23
/v3/api/session/disconnect	23
Parameters	24
Result	24
/v3/api/session/exec	24
Parameters	24
Standard In	24
Result	24
/v3/api/session/exec-bg	25
Parameters	25

Result	25
/v3/api/session/list	25
Parameters	25
Result	26
/v3/api/session/list-all-users	26
Parameters	27
Result	27
/v3/api/session/list-terminated	27
Parameters	27
Result	27
/v3/api/session/log	28
Parameters	28
Result	28
/v3/api/session/params	28
Parameters	28
Result	28
/v3/api/session/purge	29
Parameters	29
Result	29
/v3/api/session/screenshot	29
Parameters	29
Result	29
/v3/api/session/shortcut	30
Parameters	30
Result	30
/v3/api/session/terminate	30
Parameters	30
Result	30
<b>Bookmark</b>	<b>30</b>
/v3/api/bookmark/list	30
Parameters	31
Result	31
/v3/api/bookmark/edit	31
Parameters	31
Result	31
/v3/api/bookmark/delete	32
Parameters	32
Result	32

/v3/api/bookmark/favorite	32
Parameters	32
Result	32
/v3/api/bookmark/unfavorite	32
Parameters	32
Result	33
<b>Shortcut</b>	<b>33</b>
/v3/api/shortcut/list	33
Parameters	33
Result	33
<b>System</b>	<b>33</b>
Auth-Ldap	34
/v3/api/system/auth-ldap/load	34
Parameters	34
Result	34
/v3/api/system/auth-ldap/save	34
Parameters	34
Result	34
Auth-Oidc	35
/v3/api/system/auth-oidc/load	35
Parameters	35
Result	35
/v3/api/system/auth-oidc/save	35
Parameters	35
Result	35
Auth-SSH	35
/v3/api/system/auth-ssh/load	36
Parameters	36
Result	36
/v3/api/system/auth-ssh/save	36
Parameters	36
Result	36
Auth-Proxy	37
/v3/api/system/auth-proxy/load	37
Parameters	37
Result	37
/v3/api/system/auth-proxy/save	37
Parameters	37

Result	37
Bookmark	37
/v3/api/system/bookmark/load	37
Parameters	38
Result	38
Bookmark Object	38
/v3/api/system/bookmark/save	38
Parameters	38
Result	38
/v3/api/system/bookmark/remove	39
Parameters	39
Result	39
Bookmark Filter	39
/v3/api/system/bookmark-filter/load	39
Parameters	39
Result	39
/v3/api/system/bookmark-filter/save	39
Parameters	39
Result	40
Client	40
/v3/api/system/client/load	40
Parameters	40
Result	40
/v3/api/system/client/save	40
Parameters	41
Result	41
Debug	41
/v3/api/system/debug/load	41
Parameters	41
Result	41
/v3/api/system/debug/save	41
Parameters	42
Result	42
Events	42
/v3/api/system/events/load	42
Parameters	42
Result	42
EVENT Object	42
/v3/api/system/events/save	42

Parameters	43
Result	43
Events Web	43
/v3/api/system/events-web/load	43
Parameters	43
Result	43
/v3/api/system/events-web/save	43
Parameters	44
Result	44
Forms	44
/v3/api/system/forms/load	44
Parameters	44
Result	44
Form Object	44
/v3/api/system/profile/save	45
Parameters	45
Result	45
HTTP Headers	45
/v3/api/system/http-headers/load	45
Parameters	45
Result	45
HTTP Header Object	45
/v3/api/system/http-headers/save	46
Parameters	46
Result	46
/v3/api/system/http-headers/remove	46
Parameters	46
Result	46
Load Balance	47
/v3/api/system/load-balance/load	47
Parameters	47
Result	47
Load Balancing Object	47
/v3/api/system/load-balance/save	47
Parameters	47
Result	48
/v3/api/system/load-balance/remove	48
Parameters	48
Result	48

/v3/api/system/load-balance/defaults	48
Parameters	48
Result	48
/v3/api/system/load-balance/set-login	48
Parameters	49
Result	49
/v3/api/system/load-balance/set-start	49
Parameters	49
Result	49
License	49
/v3/api/system/license/load	49
Parameters	49
Result	49
License Object	50
/v3/api/system/license/save	50
Parameters	50
Result	50
/v3/api/system/license/remove	50
Parameters	50
Result	50
/v3/api/system/license/reread	50
Parameters	51
Result	51
/v3/api/system/license/usage	51
Parameters	51
Result	51
License Usage Object	51
Logins	51
/v3/api/system/logins/load	52
Parameters	52
Result	52
/v3/api/system/logins/save	52
Parameters	52
Result	52
Metrics	52
/v3/api/system/metrics/load	52
Parameters	53
Result	1
Metrics Script Object	53



/v3/api/system/metrics/save	53
Parameters	53
Result	53
/v3/api/system/metrics/remove	54
Parameters	54
Result	54
Permissions	54
/v3/api/system/permissions/load	54
Parameters	54
Result	54
/v3/api/system/permissions/save	56
Parameters	56
Result	56
Profile	56
/v3/api/system/profile/load	56
Parameters	56
Result	56
Profile Object	56
/v3/api/system/profile/save	57
Parameters	58
Result	58
/v3/api/system/license/remove	58
Parameters	58
Result	58
Schedule	58
/v3/api/system/schedule/load-filter	58
Parameters	59
Result	59
/v3/api/system/schedule/save-filter	59
Parameters	59
Result	59
Session Start	59
/v3/api/system/session-start/load	59
Parameters	59
Result	59
/v3/api/system/settings/save	60
Parameters	60
Result	60
Settings	60

File location	60
/v3/api/system/settings/load	60
Parameters	60
Result	60
/v3/api/system/settings/save	61
Parameters	61
Result	61
Static	61
File location	61
/v3/api/system/static/load	61
Parameters	62
Result	62
/v3/api/system/static/save	62
Parameters	62
Result	62
System Log	62
/v3/api/system/systemlog/log	62
Parameters	62
Result	62
Theme	63
/v3/api/system/theme/load	63
Parameters	63
Result	63
Theme Object	63
/v3/api/system/theme/save	63
Parameters	64
Result	64
/v3/api/system/theme/remove	64
Parameters	64
Result	64
Use	64
/v3/api/system/use/load	65
Parameters	65
Result	65
/v3/api/system/use/save	65
Parameters	65
Result	65
WWW	65
File location	66

/v3/api/system/www/load	66
Parameters	66
Result	66
/v3/api/system/www/save	66
Parameters	66
Result	66

# Introduction

FastX API is a web based REST api. You can send your request either by GET or POST.

## Authorization Token

You must send an authorization token with each request. This is the JSONWEBTOKEN that you receive when logging in or created using proxy authentication. There are several ways to add the authorization token. The preferred method is to add it in the HTTP HEADER as as Bearer token, or as a cookie with a CSRF-REQUEST as it is most secure

### HTTP HEADER

X-FASTX-TOKEN has been deprecated in favor of the more standard Bearer Token authorization.

[Deprecated] X-FASTX-TOKEN

### Bearer Token

Set the **Authorization** http header to Bearer YOUR\_JSON\_WEB\_TOKEN

*Authorization : Bearer YOUR\_JSON\_WEB\_TOKEN*

### Cookie Authentication

Upon Authentication FastX will set an httpOnly cookie. If you set the X-CSRF-TOKEN to the jti of the JSON Web Token, the server will match the jti with the cookie and use that as the token.

### GET/POST

token

# Error Object

Unless noted, the API error object has the following format

```
{
  error: {
    "name": "ErrorName",
    "message": "The display error message",
    "stack": "Optional stack trace"
  }
}
```

# General

## /v3/api

Get configuration information. This information does not require a X-FASTX-TOKEN

### Parameters

None

### Result

```
{
  "result": {
    "build": "3.0.XXX", /* the version string */
  }
}
```

## /v3/api/config

# Auth

# SSH

The SSH api call is a state machine that allows you to log in using various authentication methods. The required parameters and results change depending on the state you are in. All intermediate stages (not the initial “login” stage, or the final “success” stage ) return an *authtoken* . This authtoken

is required to be sent with every request. If you want to disable the SSH state machine, add the “basic” parameter to the login request. Basic authentication will attempt to authenticate username and password only and will fail otherwise.

## /v3/api/auth/ssh

### Basic Authentication

FastX will attempt to authenticate with username and password only. This disables the SSH state machine. If the username/password fails, the api will return an error.

#### Parameters

```
{
  "username": "STRING_VALUE", /* <required> SSH username */
  "password": "STRING_VALUE", /* SSH Password */
  "basic": true /* Force username/password authentication only */
  "admin": false /* Attempt admin login (always logs in locally. Fails if user is
not an admin) */
}
```

#### Result

```
{
  "result": {
    "stage": "success", /* authentication stage */
    "token": "STRING_VALUE", /* connection token which is required during
authentication */
    "csrf": "STRING_VALUE", /* csrf Token */
  }
}
```

### SSH State Machine Stage: “login”

#### Parameters

```
{
  "username": "STRING_VALUE", /* <required> SSH username */
  "password": "STRING_VALUE", /* SSH Password */
  "admin": false, /* Attempt admin login (always logs in locally. Fails if user is
not an admin) */
  "usePK": false, /* enable public-key authentication */
  "schedule": false, /* Enable scheduling */
  "banner": false, /* Enable Banners */
  "params": {} /* Custom parameters object */
}
```

#### Result

JSON object. The object contains different members depending on the authentication stage. Authentication has not completed until the 'success' stage has been reached.

```
{
  "result": {
    "stage": "form" | "banner" | "public-key" | "keyboard-interactive" |
    "password" | "success", /* authentication stage */
    "authtoken": "STRING_VALUE", /* connection token which is required
    during authentication */
    "prompt": "STRING_VALUE", /* (stage keyboard-interactive only) text
    description of the prompt */
    "banner": "STRING_VALUE", /* (stage banner only) text of the banner to
    display */
    "server": [Server1, Server2, ServerN] /* (stage server only) server data to
    display */
  }
}
```

Stage: server

Next Step: The Server stage returns a list of server objects that a user can choose from. The client should display the server list. When a user has made the selection, add serverId to the params object and resend the login data

Server Object

```
{
  "id" : "serverId",
  "hostname": "host.example.com"
}
```

Stage: banner

Next Step: Display the banner. Acknowledge that the banner has been displayed

Stage: public-key

Next Step: Send the public key to the server

Stage: keyboard-interactive

Next Step: The prompts parameter contains an array of prompts that the user should make responses to.

Stage: password

Next Step: Password based authentication

Stage: success

User has successfully logged in and can now issue api commands

## SSH State Machine Stage: “banner”

Parameters

```
{  
  "authtoken": "STRING_VALUE", /* The authorization token */  
}
```

Result

JSON object of the authentication stage. See `/api/v3/auth/ssh`

## SSH State Machine Stage: “keyboard-interactive”

Parameters

```
{  
  "authtoken": "STRING_VALUE", /* The authorization token */  
}
```

Result

JSON object of the authentication stage. See `/api/v3/auth/ssh`

## SSH State Machine Stage: “password”

Answer the prompt of the password stag

Parameters

```
{  
  "authtoken": "STRING_VALUE", /* The authorization token */  
  "password": "STRING_VALUE" /* SSH Password */  
}
```

Result

JSON object of the authentication stage. See `/api/v3/auth/ssh`

## SSH State Machine Stage: “public-key”

Send the public key to the server during authentication

## Parameters

```
{
  "authToken": "STRING_VALUE", /* The authorization token */
  "publicKey": "STRING_VALUE" /* Base64 encoded public key of the SSH key */
}
```

### The format of the Public Key is as follows

4 bytes – unsigned int: length X of string to come

X bytes – string: this will be 'ssh-rsa' (7 chars)

4 bytes – unsigned int: length Y of byte array

Y bytes – bigint of 'e'

4 bytes – unsigned int: length Z of byte array

Z bytes – bigint of 'n'

Result: Stage "sign"

If you send a public key that the server will accept, you will move to the sign stage

```
{
  "result": {
    "stage": "sign"
    "authToken": "STRING_VALUE", /* The authorization token */
    "signData": "STRING_VALUE", /* Base64 encoded data of that you should sign
with the public key you just sent */
  }
}
```

Result: Stage "public-key"

If the public key is not accepted by the server, you will be sent back to the public key stage. At this point send a different public key in your key store. If you have no more public keys to send, send an empty string "" as the *publicKey* parameter to move on to a new stage.

Result: Others

JSON

object of the authentication stage. See `/api/v3/auth/ssh`

### SSH State Machine Stage: "sign"

Sign the data and send to the server during authentication



## Parameters

```
{
  "authtoken": "STRING_VALUE", /* The authorization token */
  "signature": "STRING_VALUE" /* Base64 encoded signed data */
}
```

## Result

JSON object of the authentication stage. See `/api/v3/auth/ssh`

# Config

`/v3/api/config/`

## Parameters

```
{}
```

## Result

```
{
  "build": "BUILD_NUMBER",
  "serverId": "STRING", /* server id of the api */
  "isManager": true, /* is the user a manager */
  "isAdmin": true, /* is the user an admin */
  "user": USER_OBJECT, /* decrypted JWT user object */
  "base": "..", /* relative path to the base of the url */
  "upgrade": true, /* is there an upgrade available */
}
```

`/v3/api/config/session`

alias for config

`/v3/api/config/shortcut`

alias for config

`/v3/api/config/system`

alias for config

/v3/api/config/manage

alias for config

# Server

## Server Object

```
{
  "serverId": "STRING", /* System server Id */
  "urls": [URL1, URL2, ... URLN], /* Array of urls of the server */
  "static": JSON OBJECT of static data
  "metrics": JSON OBJECT of metrics data
  "hostname": "STRING", /* hostname */
  "processUptime": NUMBER, /* number of seconds the web server process has
been running */
  "osUptime": NUMBER, /* number of seconds the OS has been running */
  "loadavg": [avg1, avg5, avg15], /* load average at 1, 5, 15 minutes */
  "totalmem": NUMBER, /* total memory on the system */
  "freemem": NUMBER, /* free memory on the system */
  "sudo": false /* DEPRECATED is the sudo user enabled */
  "create": ["start", "login"], /* Array of start actions */
  "public": "STRING", /* Public Key of the server */
  "gateway": false, /* Is the server a gateway */
  "reservations": false, /* are reservations enabled on this system */
}
```

/v3/api/server

Parameters

```
{}
```

Result

```
{
  "total_rows": 3, /* Number of rows */
}
```

```
"rows": Array of SERVER OBJECTS,  
"offset": 0  
}
```

/v3/api/server/list

alias for server/list

## User

/v3/api/user/me

Get the current settings of the user

Parameters

```
{}
```

Result

```
{  
  "config": {  
    "session": {  
      "defaultView": "grid", /* default session view */  
      "views": ["grid", "list"], /* available session views */  
    }  
  },  
  "login": DECRYPTED_JSON_WEBTOKEN_OBJECT,  
  "permissions": PERMISSIONS_OBJECT,  
  "preferences": {}  
}
```

DECRYPTED\_JSON\_WEBTOKEN\_OBJECT

[See Logins](#)

PERMISSIONS\_OBJECT

[See Permissions](#)

/v3/api/user/logout

Logs user out and deletes the token

## Parameters

None

## Result

```
{
  "result": null
}
```

## /v3/api/user/shutdown

Shuts down the link process of the user. Users cannot start new sessions without a link process running.

## Parameters

None

## Result

```
{
  "result": "Goodbye"
}
```

## /v3/api/user/keepalive

Sends a keepalive call to keep the user session open

## Parameters

None

## Result

```
{
  "result": {
    "status": "STRING_VALUE", /* [OPTIONAL] Status message from the link process
*/
    "token": "STRING_VALUE" /* The token. This token may be different than the
original and revokes the old one */
  }
}
```

```
}  
}
```

# Session

## /v3/api/session/start

Start a new session

Alias: /v3/api/session/start/start

### Parameters

```
{  
  "banner": true, /* enable banner */  
  "forms": [form1, form2 ... formN], /* array of form ids */  
  "command": "STRING_VALUE", /* <required> Command to execute */  
  "geometry": "1024x768" | "rootless", /* geometry of the session */  
  "icon": "STRING_VALUE", /* dataurl of icon file */  
  "id": "STRING_VALUE", /* specify the id of the session */  
  "name": "STRING_VALUE" /* Set the name parameter */  
  "keyboardLayout": INTEGER, /* (default 0x0000409 -- US English) default  
  keyboard layout on startup. See Keyboard Note */  
  "serverId": "STRING_VALUE", /* Server Id that the client wants to start the  
  session on (request does not have to be honored) */  
  "forms": ["form1", "form2" ...] /* array of form ids */  
  "params": { /* user defined parameters */  
    "key1": "value1",  
    "key2": "value2",  
    ...  
  },  
  "schedule": true, /* Upgrade start command to allow a job scheduler to run */  
  "auth": SSH_OBJECT /* Upgrade start command to log in via SSH first */  
}
```

### Keyboard Note

FastX can change the keyboard layout on the fly during a running session. However certain applications (notably GNOME Desktop) use the default keyboard when setting up their keyboard layouts, ignoring the FastX keyboard change in the protocol. Set the layout to the default you prefer to use when starting a session.

Layouts are based on the layouts in [Microsoft Keyboard Identifiers and Input Types](#).

## Result

Default result

[Connect Object](#). See [connect](#)

Stage: form

The form stage is a special stage to get more

```
{
  "stage": "form"
  "form": FORM_OBJECT
}
```

Show the form to the user. Add the result of the form to the params object. Then filter out the form id from forms array and resend the data

If auth is set

The start command will first run through the SSH state machine. Refer to the SSH state machine documentation.

on stage === 'success' the connect object is returned

If schedule is set

If schedule is set, then the client is aware of job schedule result. It is up to the server to determine if this application will be scheduled or start immediately.

The result can be any of the previous results (connect, or SSH results).

If stage === 'scheduled' the following result object is returned

```
{
  "stage": "schedule", /* the command has been scheduled */
  "code": 0, /* exit code */
  "output": [{ "line":
    "output_line_1", "type": "stdout | stderr | system", "eof": false},
    ...] /* Array of output objects that can be parsed and displayed to the
user */
}
```

## Error

The start error object has a custom error

```
{
  "name" : "STRING_VALUE", /* Error name */
  "message": "STRING_VALUE", /* Error message */
}
```

```

    "data" : {
      "log" : {
        "server" : "(complete server output)",
        "xorg" : "(complete text from xorg.log)"
      }
    }
  }
}

```

## /v3/api/session/start/bookmark

Start a new session using a bookmark id

### Parameters

```

{
  "id": "STRING_VALUE", /* <required> Bookmark id */
  "keyboardLayout": INTEGER, /* (default 0x0000409 -- US English) default keyboard
  layout on startup. See Keyboard Note */
  "params": { /* user defined parameters */
    "key1": "value1",
    "key2": "value2",
    ...
  },
  "schedule": true, /* Upgrade start command to allow a job scheduler to run */
  "auth": SSH_OBJECT /* Upgrade start command to log in via SSH first */
}

```

### Result

[Connect Object](#). See [connect](#)

### Error

See [Start Error](#)

## /v3/api/session/connect

Reconnect to an existing session

### Parameters

```

{
  "id": "STRING_VALUE" /* <required> Session Id */
  "params": { /* user parameters to set */
    "key1": "value1",
    "key2": "value2",
    ...
  }
}

```

```
}  
}
```

## Result

```
{  
  "result": {  
    "stage": "success", /* Final stage if using authenticated starts */  
    "geometry": "1024x768", /* geometry of the session */  
    "id": "STRING_VALUE", /* session id */  
    "login": "STRING_VALUE", /* username who started the session */  
    "params": { /* user parameters that have been set */  
      "key1": "value1",  
      "key2": "value2",  
    },  
    "password": "STRING_VALUE", /* one-time password that will be used to connect  
to the session */  
    "port": 40000, /* local port the session is listening on */  
    "windowMode": "rootless", | "desktop" /* window mode of the session */  
    "uri": "STRING_VALUE", /* (Optional) URI of web session to connect to */  
    "urls": ["STRING_VALUE1", "STRING_VALUE2" ...], /* Array of websocket urls  
that can be used to connect to the session */  
  }  
}
```

## /v3/api/session/disconnect

Disconnect all users from the session

### Parameters

```
{  
  "id": "STRING_VALUE" /* <required> Session Id */  
}
```

## Result

```
{  
  "result": null  
}
```

## /v3/api/session/exec

Execute a command on the session.

### Parameters



```
{
  "id": "STRING_VALUE", /* <required> Session Id */
  "command": "STRING_VALUE", /* <required> Command you with to execute */
  "stdin": "STRING_VALUE" | [STRING_VALUE] | JSON_Object, /* Standard In.
see note */
  "env": JSON_Object /* Key value pairs of environment variables to set when
execing the command */
}
```

#### Standard In

If this is a string, then the string will be passed to the command on stdin. I terminating newline will **not** be appended. If this is an array of strings, then each string will be sent on stdin, with a newline appended after each. If this is an object, then it will be JSON-encoded, and sent on stdin. If not set, then /dev/null will be used for stdin

#### Result

```
{
  "result": {
    "code": 0, /* Linux exit code. the low 7 bits is the signal, and the upper 8
bits is the exit value */
    "output": [OUTPUT, OUTPUT, OUTPUT, ...], /* Array of OUTPUT Objects */
  }
}
```

#### OUTPUT Object

```
{
  "type": "stderr" | "stdout" | "system", /* Output type */
  "line": "STRING_VALUE", /* Text of the line */
  "no_eol": false, /* Did the line string terminate with a new line (Only for the
final line) */
}
```

## /v3/api/session/exec-bg

Execute a command on the session and put it in the background .

#### Parameters

```
{
  "id": "STRING_VALUE", /* <required> Session Id */
  "command": "STRING_VALUE", /* <required> Command you with to execute */
  "env": JSON_Object /* Key value pairs of environment variables to set when
execing the command */
}
```

```
}
```

## Result

```
{  
  "result": {  
    "PID": 1000, /* PID of the command running */  
  }  
}
```

## /v3/api/session/list

List the user's currently running sessions

### Parameters

```
{  
  "start": 0. /* Starting session  
object */  
  "sortBy": "STRING_VALUE", /* member to sort by (it  
will also check members in "params") */  
  "sortReverse": false, /* return session objects  
in reverse sort order */  
  "limit": Infinity, /* maximum number of  
session objects to return */  
  "filter": ["FILTER_STRING_1", "FILTER_STRING_2", ...] /* filter session objects  
*/  
}
```

**FILTER\_STRING** is defined as follows "name==value1,value2,valueN"

name -- the member name to filter on

value1,value2,valueN -- comma separated list of values which acts as an OR

You can have multiple filters which act as AND

## Result

```
{  
  "result": {  
    "total_rows": 10, /* number of session objects total (not filtered) */  
  }  
}
```

```

"offset" : 0, /* Offset from start (for pagination)
"rows": [ /* Array of Session Objects */
  {
    "appPid": 1234, /* Pid of the process started from command */
    "clients": 0, /* number of clients currently connected */
    "command": "STRING_VALUE", /* initial command execed when the session was
launched */
    "connectTime": 30, /* number of seconds that there has been a user
connected to the session */
    "cpuPercentage": 25, /* CPU Percentage parameter when the session was
started */
    "disconnectTimeout": 0, /* disconnectTimeout parameter when the session
was started */
    "display": ":100", /* DISPLAY number of the session */
    "geometry": "1024x768", /* widthxheight of the session */
    "hostname": "STRING_VALUE", /* hostname of the machine the session is
running on */
    "id": "STRING_VALUE", /* Session Id */
    "lastConnect": "TIMESTAMP", /* timestamp when the session was connected to
*/
    "lastDisconnect": "TIMESTAMP", /* timestamp when the session was
disconnected from */
    "login": "STRING_VALUE", /* name of the user who started the session */
    "params":{ /* user parameters that have been set */
      "key1": "value1",
      "key2": "value2"
      ...
    }
    "serverId": "STRING_VALUE", /* id of the FastX server running the session
*/
    "serverPid": 5678, /* Pid of the session process */
    "sharing": true, /* Sharing parameter when the session was started */
    "started": "TIMESTAMP", /* timestamp when the session was started */
    "uptime": 46351273, /* Number of ms since the session was started */
    "videoRam": 128000, /* Video RAM parameter when the session was started */
    "windowMode": "rootless" | "desktop", /* window mode of the session */
    "terminated": { "message": "Terminate reason" }, /* Terminated Sessions
only: the session has terminated */
    "ended": "TIMESTAMP", /* Terminated Sessions only: the time the session
terminated */
  }
]
}

```

## /v3/api/session/list-all-users

List the all the currently running sessions. User must have admin rights to use this API call

### Parameters

[See session/list](#)

### Result

[See session/list](#)

## /v3/api/session/list-terminated

List the all the sessions that have been terminated. User must have admin rights to use this API call

### Parameters

[See session/list](#)

### Result

[See session/list](#)

## /v3/api/session/log

View a session's log file. The corresponding log files are found in *\$HOME/.fastx\_server/hostname/sessions/FX3-sessionid/*

### Parameters

```
{
  "id": "STRING_VALUE" /* <required> Session Id */
}
```

### Result

```
{
  "result": {
    "monitor": "STRING_VALUE", /* text of the monitor.log */
    "server": "STRING_VALUE", /* text of the server.log */
    "stderr": "STRING_VALUE", /* text of stderr.log */
    "stdout": "STRING_VALUE", /* text of stdout.log */
    "xorg": "STRING_VALUE", /* text of xorg.log */
  }
}
```

## /v3/api/session/params

Add custom parameters to the session

### Parameters

```
{
  "id": "STRING_VALUE"      /* <required> Session Id */
  "params": {               /* key/value pairs of the parameters */
    "key1": "value1",
    "key2": "value2",
    ...
  }
}
```

Note: Set a key to an empty string "" to delete the parameter

### Result

```
{
  "result": {               /* the user parameters */
    "key1": "value1",
    "key2": "value2",
    ...
  }
}
```

## /v3/api/session/purge

Delete the session from the database. This DOES NOT terminate the session or interact with the actual running session in any way. The session will be put back into the database if there is an update. This option is useful in a cluster when a system has gone down and will not return, or the serverId of a system has changed.

### Parameters

```
{
  "id": "STRING_VALUE"      /* <required> Session Id */
}
```

### Result

```
{
  "result": true
}
```

## /v3/api/session/screenshot

Take a screenshot of the running session

### Parameters

```
{
  "id": "STRING_VALUE",      /* <required> session id */
  "width": 800,              /* screenshot width in pixels */
  "height": 600,            /* screenshot height in pixels */
  "format": "png" | "jpeg", /* Specify image format default "png" */
  "keep_aspect": 1 | 0      /* keep aspect ratio when reducing image size */
  "geometry": "widthxheight" /* specify the geometry in pixels (same as using
width and height members) */
}
```

### Result

```
{
  "result": {
    "src": "STRING_VALUE" /* dataUrl of the image data */
  }
}
```

## /v3/api/session/shortcut

Connect to a session which has the shortcut parameter or start a new session if no session exists

### Parameters

```
{
  "id": "STRING_VALUE" /* <required> Bookmark id to search for */
}
```

### Result

Connect Object. See connect

## /v3/api/session/terminate

Terminate a session

## Parameters

```
{
  "id": "STRING_VALUE" /* <required> Session Id */
}
```

## Result

```
{
  "result": {
    "status": "STRING_VALUE", /* output of terminate attempt */
  }
}
```

# Bookmark

## /v3/api/bookmark/list

List the favorites, history, and suggestions (global bookmarks)

## Parameters

None

## Result

```
{
  "result": {
    "favorites": [BOOKMARK_ID_1, BOOKMARK_ID_2, ...], /* array of favorited
bookmark ids */
    "system": [BOOKMARK_OBJECT_1, BOOKMARK_OBJECT_2, ...], /* array of global
bookmarks */
    "user": [BOOKMARK_OBJECT_1, BOOKMARK_OBJECT_2, ...], /* array of user
defined bookmarks */
    "history": [BOOKMARK_OBJECT_1, BOOKMARK_OBJECT_2, ...], /* array history
*/
  }
}
```

*BOOKMARK\_OBJECT* is defined as follows

```
{
  "id": "STRING_VALUE", /* <required> bookmark id */
}
```

```

"command": "STRING_VALUE",          /* <required> command to execute */
"name": "STRING_VALUE",            /* bookmark display name */
"geometry": "widthxheight" | "rootless", /* geometry of the bookmark */
"profile": "STRING_VALUE",         /* profile id to use */
"tags": ["tag1","tag2", ..., "tagN"] /* array of tag strings */
"icon": "STRING_VALUE",           /* icon to show (dataURL or string) */
"static": {}                      /* JSON Object of static data */
"params": {}                       /* JSON Object of custom parameters */
}

```

## /v3/api/bookmark/edit

Create or edit a user defined bookmark

### Parameters

```

{
  "id": "STRING_VALUE",            /* <required> bookmark id */
  "command": "STRING_VALUE",       /* <required> command to execute */
  "name": "STRING_VALUE",         /* bookmark display name */
  "geometry": "widthxheight" | "rootless", /* geometry of the bookmark */
  "profile": "STRING_VALUE", /* profile id to use */
  "tags": ["tag1","tag2", ..., "tagN"] /* array of tag strings */
  "icon": "STRING_VALUE"          /* icon to show */
}

```

### Result

[See bookmark/list](#)

## /v3/api/bookmark/delete

Delete a user's favorite or a history object

### Parameters

```

{
  "id": "STRING_VALUE" /* <required> bookmark id */
}

```

### Result

[See bookmark/list](#)



## /v3/api/bookmark/favorite

Add an existing bookmark to the user's favorites list

### Parameters

```
{
  "id": "STRING_VALUE" /* <required> bookmark id */
}
```

### Result

See [bookmark/list](#)

## /v3/api/bookmark/unfavorite

Remove an existing bookmark from the user's favorites list

### Parameters

```
{
  "id": "STRING_VALUE" /* <required> bookmark id */
}
```

### Result

See [bookmark/list](#)

# Shortcut

## /v3/api/shortcut/list

List the user's shortcuts. Shortcuts extend the functionality of bookmarks by associating sessions with the bookmarks. If a session is already running, the shortcut will reconnect to the running session. If a session is not running it will launch a new session.

### Parameters

```
{}
```

### Result

```
{ "result": {
```

```

    "total_rows": 10, /* number of shortcut objects total (not filtered) */
    "offset" : 0, /* Offset from start (for pagination) */
    "rows": [ /* Array of Shortcut Objects */
    }
}

```

A SHORTCUT OBJECT is defined as

```

{
  "id": "STRING_VALUE", /* <required> bookmark id */
  "command": "STRING_VALUE", /* <required> command to execute */
  "name": "STRING_VALUE", /* bookmark display name */
  "geometry": "widthxheight" | "rootless", /* geometry of the bookmark */
  "profile": "STRING_VALUE", /* profile id to use */
  "tags": ["tag1", "tag2", ..., "tagN"] /* array of tag strings */
  "icon": "STRING_VALUE", /* icon to show (typically a dataURL) */
  "sessions": [sessionId1, sessionId2 ...] /* sessions launched from the bookmark */
}

```

## System

The system section is for API methods pertaining to the configuration. You must be an admin to use these api calls. Unless otherwise noted, configuration is stored in the web server database.

## Auth-Ldap

Configurations related to FastX's Ldap Configuration. Used to get extended profile data of users

Changes to this section affect all members in a FastX Cluster

### /v3/api/system/auth-ldap/load

Returns the Ldap configuration

#### Parameters

```
{}
```

#### Result

```

{
  "result":{
    "url": Url, /* Url of the Ldap Server*/
    "bindDN": "STRING", /* BindDN */
  }
}

```

```
"bindPassword": "STRING", /* Bind password*/
"searchBase": "STRING", /* Search Base of searches */
}
}
```

## /v3/api/system/auth-ldap/save

Saves the SSH configuration

### Parameters

See `auth-ldap load result`

### Result

```
{
  "result": true
}
```

## Auth-Oidc

Configurations related to FastX's OpenID Connect authorization

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/auth-oidc/load

Returns the OIDC configuration

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "enabled": Boolean, /* Enable/disable OIDC authentication */
    "redirectUrl": URL, /* Url to redirect after success:
https://your.example.com/auth/oidc/callback */
    "issuer": "STRING", /* OIDC Issuer */
    "clientId": "STRING", /* Client Id*/
    "clientSecret": "STRING", /* Client Secret */
  }
}
```

```
"logoutRedirectUrl": URL, /* Redirect URL after Logout,
https://your.example.com/auth/oidc */
}
}
```

## /v3/api/system/auth-oidc/save

Saves the OIDC configuration

### Parameters

See `auth-oidc load result`

### Result

```
{
  "result": true
}
```

## Auth-SSH

Configurations related to FastX's SSH authorization

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/auth-ssh/load

Returns the SSH configuration

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "disable": Boolean, /* Enable/disable SSH authentication */
    "disablePublicKeyAuthentication": Boolean,/* Enable/disable SSH Public Key
authentication */
    "hideBackground": Boolean, /* Hide background image on web page */
    "hidePassword": Boolean, /* Hides Initial password field on web page so only
username is visible */
    "passwordAuthenticationOnly": Boolean, /* Disables all SSH authentication
```

```
methods except username/password */
  "theme": "light" | "dark" | "classic", /* Sets the web page theme */
  "serverFilter": {
    "script": "script to filter out servers */
  }
}
}
```

## /v3/api/system/auth-ssh/save

Saves the SSH configuration

### Parameters

See `auth-ssh load result`

### Result

```
{
  "result": true
}
```

## Auth-Proxy

Configurations related to FastX's Proxy Configuration. Used to access the API without having to log in with SSH

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/auth-proxy/load

Returns the Proxy configuration

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "secret": "SECRET_KEY", /* Secret key used to sign the proxy JWT */
  }
}
```

## /v3/api/system/auth-proxy/save

Saves the Proxy configuration

### Parameters

See `auth-proxy load result`

### Result

```
{
  "result": true
}
```

## Bookmark

Configurations related to Creating and Editing System bookmarks

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/bookmark/load

Returns the System Bookmarks

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "total_rows": 5, /* Number of total System Bookmarks */
    "offset": 0, /* Starting Bookmark */
    "rows": [ BOOKMARK_1, BOOKMARK_2, ...], /* Array of BOOKMARK OBJECTS */
  }
}
```

### Bookmark Object

```
{
  "id": "STRING_VALUE", /* Bookmark ID */
  "data": {
    "id": "STRING_VALUE", /* Bookmark ID. Same as above */
    "command": "STRING_VALUE", /* Command to execute */
    "icon": "STRING_VALUE", /* Icon to display */
    "name": "STRING_VALUE", /* Bookmark name */
    "profile": "STRING_VALUE", /* id of Profile that will be used when launching
session */
    "tags": ["tag1", "tag2", ...], /* Array of tags */
  }
}
```

## /v3/api/system/bookmark/save

Creates/Edits a bookmark

### Parameters

See Bookmark Object. If id is omitted, creates a new Bookmark

### Result

```
{
  "result": true
}
```

## /v3/api/system/bookmark/remove

Deletes a bookmark

### Parameters

```
{
  "id": "STRING_VALUE", /* id to delete */
}
```

### Result

```
{
  "result": true
}
```

## Bookmark Filter

Configurations related to FastX's Bookmark Filter. Filters out all the bookmarks so a subset is returned

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/bookmark-filter/load

Returns the Bookmark Filter configuration

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "script":"STRING", /* Bookmark filter script */
  }
}
```

## /v3/api/system/bookmark-filter/save

Saves the bookmark filter configuration

### Parameters

See `bookmark-filter load result`

### Result

```
{
  "result": true
}
```

## Client

Configuration for connected sessions. These configuration settings are typically used when creating custom clients and you want to better integrate FastX into your existing UI. `disableTokenValidation` is used when you already have a password from a connect call and you want to forward that again.

Changes to this section affect all members in a FastX Cluster



## /v3/api/system/client/load

Returns the Client configuration

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "disableMenu": Boolean, /* Hide the Menu */
    "disableModal": Boolean,/* Hide any Modal popups */
    "disableTokenValidation": Boolean, /* Do not verify the token on connection */
    "keyboardLayout": 1033, /* Default Keyboard layout if none currently exists on
client */
    "keyboardType": 4, /* Default Keyboard type if none currently exists on client
*/
  }
}
```

## /v3/api/system/client/save

Saves the Client configuration

### Parameters

See client load result object

### Result

```
{
  "result": true
}
```

## Debug

Configurations related to FastX's Debugging

Changes to this section affect the current Server only

## /v3/api/system/debug/load

Returns the debug configuration

## Parameters

```
{}
```

## Result

```
{
  "result":{
    "fastx:request": false, /* log HTTP requests */
    "fastx:log": false, /* misc logging */
    "fastx:error": false, /* misc error logging */
    "fastx:api:request": false, /* log api requests */
    "fastx:api:process": false, /* log processing of the request */
    "fastx:link:messages": false, /* log web server to link messages */
    "fastx:link:auth": false, /* log web server to link connections */
    "fastx:link:netstring": false, /* log low level webserver to link messages */
    "fastx:cluster:comm": false, /* log cluster communication */
    "fastx:cluster:sse": false, /* log cluster server sent events */
    "fastx:cluster:db": false, /* log cluster database communications */
    "fastx:oidc": false, /* log OpenId Connect */
    "fastx:ssh": false, /* log SSH connection */
    "fastx:ws:connection": false, /* log session protocol connections */
    "fastx:ws:messages": false, /* log all protocol messages */
  }
}
```

## /v3/api/system/debug/save

Saves the OIDC configuration

## Parameters

See `debug load result`

## Result

```
{
  "result": true
}
```

## Events

Configuration for session events

## /v3/api/system/events/load

Returns the configured events

### Parameters

```
{}
```

### Result

```
{
  "result": {
    "total_rows": 5, /* number of rows */
    "offset": 0, /* offset */
    "rows": [ EVENT1, EVENT2 ... EVENTN], /* Session Events */
  }
}
```

### EVENT Object

```
{
  "id": "EventID",
  "data" {
    "id": "EventID",
    "script": "function(o) {}", /* Javascript function */
  }
}
```

## /v3/api/system/events/save

Saves an event

### Parameters

```
{
  "id": "Event ID",
  "data": {
    "script": "javascript function"
  }
}
```

### Result

```
{
  "result": true
}
```

# Events Web

Configuration for session update events

## /v3/api/system/events-web/load

Returns the configured events

### Parameters

```
{}
```

### Result

```
{  
  "result": {  
    "script": "javascript function"  
  }  
}
```

## /v3/api/system/events-web/save

Saves an event

### Parameters

```
{  
  "script": "javascript function"  
}
```

### Result

```
{  
  "result": true  
}
```

# Forms

Configuration for creating custom start forms

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/forms/load

Returns the session profiles.

### Parameters

```
{}
```

### Result

```
{
  "result": {
    "total_rows": 10, /* Total number of forms */
    "offset": 0, /* row offset */
    "rows": [ FORM_1, FORM_2, ...] /* Array of Form Objects */
  }
}
```

### Form Object

The form object creates a form for the FastX session.

```
{
  "id": "STRING_VALUE", /* Form Id */
  "data": {
    "name": "STRING", /* Display name of the form */
    "html": "<div></div>", /* HTML of the form */
    "allowUnsafeHtml": false, /* allow unsanitized HTML/javascript in the form */
    "static": {}, /* Static data json object used in filter functions */
  }
}
```

## /v3/api/system/profile/save

Create or edit a form

### Parameters

The Form Object. Omitting the id will create a new form

## Result

```
{
  "result": true
}
```

# HTTP Headers

Set Http Headers on different pages

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/http-headers/load

Returns the Headers

### Parameters

```
{}
```

## Result

```
{
  "result":{
    "total_rows": 5, /* Number of total Http Headers */
    "offset": 0, /* Starting Header */
    "rows": [ HEADER_1, HEADER_2, ...], /* Array of HTTP HEADER OBJECTS */
  }
}
```

## HTTP Header Object

```
{
  "id": "STRING_VALUE", /* Header Id */
  "data": {
    "header": "STRING_VALUE", /* HTTP Header */
    "value": "STRING_VALUE", /* HTTP Header Value */
    "path": "^.*$", /* Regular expression defining where to set the header */
  }
}
```

## /v3/api/system/http-headers/save

Creates/Edits an http header

### Parameters

See Header Object. If id is omitted, creates a new Header

### Result

```
{
  "result": true
}
```

## /v3/api/system/http-headers/remove

Deletes an Http header

### Parameters

```
{
  "id": "STRING_VALUE", /* id to delete */
}
```

### Result

```
{
  "result": true
}
```

## Load Balance

Configure load balancing scripts

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/load-balance/load

Returns the load balancing scripts

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "total_rows": 5, /* Number of Load balancing scripts */
    "offset": 0, /* Starting Load Balancing Script */
    "rows": [ SCRIPT_1, SCRIPT_2, ...], /* Array of LOAD BALANCING OBJECTS */
  }
}
```

## Load Balancing Object

```
{
  "id": "STRING_VALUE", /* Load Balancing ID */
  "data": {
    "name": "STRING_VALUE", /* Name of the load balancing script */
    "script": "STRING_VALUE, /* Load balancing function */
  }
}
```

## /v3/api/system/load-balance/save

Creates/Edits a Load balancing Script

### Parameters

See Load Balancing Object. If id is omitted, creates a new Load Balancing Object

### Result

```
{
  "result": true
}
```

## /v3/api/system/load-balance/remove

Deletes a Load Balancing Script

### Parameters

```
{
  "id": "STRING_VALUE", /* id to delete */
}
```

### Result



```
{
  "result": true
}
```

## /v3/api/system/load-balance/defaults

Returns the defaults for load balancing

Parameters

```
{}
```

Result

```
{
  "result": {
    "login": { "ids": ["id1", "id2", ..., "idN"] },
    "start": { "ids": ["id1", "id2", ..., "idN"] },
  }
}
```

## /v3/api/system/load-balance/set-login

Set the login load balancing script

Parameters

```
{
  "ids": ["STRING1", "STRING2", ..., "STRINGN"] /* 3.1 -- array of load balancing
scripts */
}
```

Result

```
{
  "result": true
}
```

## /v3/api/system/load-balance/set-start

Set the start load balancing script

Parameters

```
{
  "ids": ["STRING1", "STRING2", ..., "STRINGN"] /* 3.1 -- array of load balancing
scripts */ }
```

## Result

```
{
  "result": true
}
```

# License

Configuration Options for managing licenses.

## /v3/api/system/license/load

Returns the license files that are stored on Local system. License files are located in */usr/lib/fastx/var/license*

## Parameters

```
{}
```

## Result

```
{
  "result": [ LICENSE_1, LICENSE_2, ...] /* Array of License Objects */
}
```

## License Object

```
{
  "filename": "STRING_VALUE", /* License file name */
}
```

## /v3/api/system/license/save

Saves license data to a new file

## Parameters

```
{
  "data": "STRING_VALUE", /* Contents of an RLM license file */
}
```

## Result

```
{
  "result": true
}
```

## /v3/api/system/license/remove

Deletes a license file

### Parameters

```
{
  "id": "STRING_VALUE", /* filename located in the license directory */
}
```

## Result

```
{
  "result": true
}
```

## /v3/api/system/license/reread

Sends an *rlmutil rlmreread* call to the license server. This may have the effect of sending license rereads to a different server depending on how your licenses are set up

### Parameters

```
{}
```

## Result

```
{
  "result": {
    "success": true
  }
}
```

## /v3/api/system/license/usage

Sends an *rlmutil rlmreread* call to the license server. This may have the effect of sending license rereads to a different server depending on how your licenses are set up

## Parameters

```
{}
```

## Result

```
{
  "result": {
    "licenses": [ USAGE_1, USAGE_2, ...] /* Array of License usage objects */
  }
}
```

## License Usage Object

```
{
  "count": 10, /* Total licenses in license file */
  "inuse": 5, /* Number of licenses currently in use */
  "version": "2020.12", /* Version Maintenance string */
}
```

# Logins

Configuration for user logins

## /v3/api/system/logins/load

Returns the login configuration

## Parameters

```
{}
```

## Result

```
{
  "result": {
    "disbleKeepalives": false,
    "linkDaemonKeepalive": true,
    "maxApiTokenAge": 10080,
    "shutdownClusterDaemonsOnLogout": false,
    "shutdownLinkDaemonOnLogout": false,
    "enableFileDownload": true,
    "fileShareRootDir": "$HOME"
  }
}
```

```
}
```

## /v3/api/system/logins/save

Saves the login configuration

### Parameters

See result load object

### Result

```
{  
  "result": true  
}
```

## Metrics

Configure Metrics scripts

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/metrics/load

Returns the metrics scripts

### Parameters

```
{}
```

### Result

```
{  
  "result":{  
    "total_rows": 5, /* Number of Metrics Scripts */  
    "offset": 0, /* Starting Metrics Script */  
    "rows": [ SCRIPT_1, SCRIPT_2, ...], /* Array of Metrics Script OBJECTS */  
  }  
}
```

## Metrics Script Object

```
{
  "id": "STRING_VALUE", /* Metric Script ID */
  "data": {
    "metric": "STRING_VALUE", /* Metric Id */
    "command": "STRING_VALUE", /* Metric Function */
  }
}
```

## /v3/api/system/metrics/save

Creates/Edits a Metrics Object

### Parameters

See Metrics Script Object. If id is omitted, creates a new Metric Script Object

### Result

```
{
  "result": true
}
```

## /v3/api/system/metrics/remove

Deletes a Metrics Object

### Parameters

```
{
  "id": "STRING_VALUE", /* id to delete */
}
```

### Result

```
{
  "result": true
}
```

## Notifications

Create notifications to send to the users

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/notifications/load

Returns the notifications

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "total_rows": 5, /* Number of Notification Scripts */
    "offset": 0, /* Starting Notification Script */
    "rows": [ N_1, N_2, ...], /* Array of Notification OBJECTS */
  }
}
```

### Notifications Object

```
{
  "id": "STRING_VALUE", /* Notification ID */
  "data": {
    "title": "STRING_VALUE", /* title */
    "summary": "STRING_VALUE", /* summary */
    "content": "STRING_VALUE", /* content */
    "public": false, /* is this in the public notifications */
  }
}
```

## /v3/api/system/notifications/save

Creates/Edits a notifications Object

### Parameters

See Notifications Object. If id is omitted, creates a new Notification Object

### Result

```
{
  "result": true
}
```

```
}
```

## /v3/api/system/notifications/remove

Deletes a Notifications Object

### Parameters

```
{  
  "id": "STRING_VALUE", /* id to delete */  
}
```

### Result

```
{  
  "result": true  
}
```

## Permissions

Set Permissions

## /v3/api/system/permissions/load

Returns the permissions configurations

### Parameters

```
{}
```

### Result

```
{  
  "result":{  
    "admin-user": [], /* array of admin user names */  
    "admin-group": [], /* array of admin linux groups */  
    "manager-user": [], /* array of manager user names */  
    "manager-group": [], /* array of manager linux groups */  
    "full-user-user": [], /* array of full user names */  
    "full-user-group": [], /* array of full user linux groups */  
    "disable-user": [], /* array of users who are disabled */  
    "disable-group": [], /* array of linux groups that are disabled */  
    "manager-enable": true, /* enable manager permissions */  
  }  
}
```



```

"limited-user-enable": true, /* enable limited user permissions */
"manager-permissions": { /* the permissions for the managers */
  "session": {
    "info": true,
    "connect": true,
    "disconnect": true,
    "params": true,
    "exec": true,
    "log": true,
    "purge": true,
    "shortcut": true,
    "terminate": true
  },
  "user": {
    "profile": true,
    "sshKeys": true,
    "logins": true
  },
  "server": {
    "info": true
  }
},
"limited-user-permissions": { /* the permissions for the limited user */
  "start": {
    "bookmark": true,
    "custom": true
  },
  "bookmark": {
    "system": true,
    "user": true,
    "history": true,
    "favorites": true
  },
  "session": {
    "info": true,
    "connect": true,
    "disconnect": true,
    "shortcut": true,
    "params": true,
    "exec": true,
    "log": true,
    "purge": true,
    "terminate": true
  },
  "user": {
    "profile": true,
    "sshKeys": true,

```

```
    "logins": true
  },
}
}
```

## /v3/api/system/permissions/save

Saves the database permissions

### Parameters

See use load result object

### Result

```
{
  "result": true
}
```

## Profile

Configuration for creating an editing session profiles

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/profile/load

Returns the session profiles.

### Parameters

```
{}
```

### Result

```
{
  "result": {
    "total_rows": 10, /* Total number of profiles */
    "offset": 0, /* row offset */
    "rows": [ PROFILE_1, PROFILE_2, ...] /* Array of Profile Objects */
  }
}
```

```
}  
}
```

## Profile Object

The profile object sets the profile parameters of the FastX session.

If the FastX is not running, the FastX session will read the `/usr/lib/fastx/var/config/session.json` file.

The `/usr/lib/fastx/var/config/session.json` file has the same format as the data section of the profile object

A special object with the id:"config/session/profile/default" is the DEFAULT profile. Starting a session with no profile set will use the DEFAULT profile

```
{  
  "id": "STRING_VALUE", /* Profile Id */  
  "data": {  
    "name": "STRING_VALUE", /* Display name */  
    "description": "STRING_VALUE", /* Display description */  
    "session": {  
      "clientcomm": ["fx-url", "fx-notify" ],  
      "clientClipboard": true, /* Enable Client Clipboard support */  
      "serverClipboard": true, /* Enable Server Clipboard support */  
      "cpuPercentage" 50, /* Max CPU the FastX Compressor will use */  
      "disconnectTimeout": 0, /* Terminate session after N minutes disconnected.  
0 disables timeout */  
      "enableVirtualGLDetection": true, /* try to detect virtualgl detection */  
      "iglx": false, /* Enable indirect GLX for older OpenGL libraries */  
      "listenTCP": true, /* Enable X server to listen on a TCP port. Also sets  
the $DISPLAY */  
      "logLevel": 3, /* Set the logging for X server */  
      "multisurface": "auto", /* ["auto", true, false] enable multisurface */  
      "offlineSharing": false, /* Enable Offline sharing. Master does not have  
to connected for users to log in */  
      "sharing": false, /* Enable Session Sharing */  
      "saveXauthDefault": false, /* Save the Xauthority file to the default  
location */  
      "videoRam": 1280000, /* Maximum RAM for video buffer. Higher numbers allow  
for larger max resolution */  
      "virtualGLOptions": "", /* Custom virtualGL options */  
      "clipboardMax": 0, /* Maximum number of byte that can be sent from server to  
client */  
      "debug": {  
        "license": false,  
        "clipboard": false  
      }  
    },  
  },  
}
```

```
"events": {
  "start": { "script": "/* custom shell commands */" },
  "connect": { "script": "/* custom shell commands */" },
  "disconnect": { "script": "/* custom shell commands */",
  "params": { "script": "/* custom shell commands */",
  "terminate": { "script": "/* custom shell commands */",
}
"static": { /* custom static data object */ }
}
}
```

## /v3/api/system/profile/save

Create or edit a profile

### Parameters

The Profile Object. Omitting the id will create a new profile

### Result

```
{
  "result": true
}
```

## /v3/api/system/license/remove

Deletes a profile. If you delete the default profile it will reset it to the factory settings

### Parameters

```
{
  "id": "STRING_VALUE", /* the profile id */
}
```

### Result

```
{
  "result": true
}
```

## Schedule

## Configure Scheduling Scripts

Changes to this section affect all members in a FastX Cluster

### /v3/api/system/schedule/load-filter

Returns the scheduling function

#### Parameters

```
{}
```

#### Result

```
{
  "result":{
    "fun": "STRING_VALUE", /* The job scheduler function */
  }
}
```

### /v3/api/system/schedule/save-filter

Edit the scheduling function

#### Parameters

```
{
  "fun": "STRING_VALUE", /* The job scheduler function */
}
```

#### Result

```
{
  "result": true
}
```

## Session Start

Settings for starting sessions

## /v3/api/system/session-start/load

Returns the session start object

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "forms": {
      "script": "function(input) { /* function to filter forms */ }"
    },
    "selectServer": {
      "script": "function(input) { /* function to filter out servers to choose
*/ }
    }
  }
}
```

## /v3/api/system/settings/save

Saves the sessions start object

### Parameters

See session start result object

### Result

```
{
  "result": true
}
```

## Settings

Local Web Server settings

Changes to this section affect THE CURRENT WEB SERVER ONLY

### File location

This object is not stored in the database. It is always stored locally on the server

```
/usr/lib/fastx/var/config/static.json
```

## /v3/api/system/settings/load

Returns the settings configuration of the local system

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "disable": ["login", "start"], /* Array of settings to disable */
    "sshport": 22, /* SSH port to use when connecting via ssh */
    "authorizedKeysDir": "STRING_VALUE", /* directory where to store authorized
keys in a CLUSTER */
    "hostname": "STRING_VALUE", /* Override hostname of this system */
    "gateway": {
      "url": "https://server.example.com:33300", /* server Url */
      "key": "abcdefg", /* secret key */
    }
  }
}
```

## /v3/api/system/settings/save

Saves the database configuration of the local system.

### Parameters

See `client load result object`

### Result

```
{
  "result": true
}
```

## Static

Configure static data on Local System

Changes to this section affect THE CURRENT WEB SERVER ONLY

## File location

This object is not stored in the database. It is always stored locally on the server

```
/usr/lib/fastx/var/config/static.json
```

## /v3/api/system/static/load

Returns the static data object configuration of the local system

### Parameters

```
{}
```

### Result

```
{  
  "result": JSON_OBJECT  
}
```

## /v3/api/system/static/save

Saves the static data configuration of the local system.

### Parameters

```
{ } JSON_OBJECT
```

The Static data is an object that gets sent with every update. For more information [see Load Balancing](#)

### Result

```
{  
  "result": true  
}
```

# System Log

Web Server's Log files



## /v3/api/system/systemlog/log

View the local web server's output

### Parameters

```
{}
```

### Result

```
{
  "result": {
    "filename": "STRING_VALUE", /* File where the logs are being written to */
    "lines": ["line1", "line2", ...], /* Array of lines of output */
  }
}
```

## Theme

Create and Edit Themes

Changes to this section affect all members in a FastX Cluster

## /v3/api/system/theme/load

Returns the Themes

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "total_rows": 5, /* Number of total Themes */
    "offset": 0, /* Starting Theme */
    "rows": [ THEME_1, THEME_2, ...], /* Array of THEME OBJECTS */
  }
}
```

### Theme Object

```
{
```

```

"id": "STRING_VALUE", /* Theme ID */
"data": {
  "name": "STRING_VALUE", /* Display name of the theme */
  "description": "STRING_VALUE", /* Description of the theme */
  "background": { /* See CSS Background Property for more details */
    "image": "STRING_VALUE", /* Background Image */
    "attachment": "STRING_VALUE", /* Background Attachment */
    "clip": "STRING_VALUE", /* Background Clipping region
"color": "STRING_VALUE", /* Background Color */
    "origin": "STRING_VALUE", /* Background Origin */
    "position": "STRING_VALUE", /* Background Position */
    "repeat": "STRING_VALUE", /* Background repeat */
  },
  "brand": {
    "logo": "STRING_VALUE", /* Logo Image (usually a dataurl) */
    "tagline": "STRING_VALUE", /* Display text to be used with the theme */
  },
  "colors": { /* All colors are CSS Color Values in strings */
    "primary": "STRING_VALUE",
    "secondary": "STRING_VALUE",
    "info": "STRING_VALUE",
    "success": "STRING_VALUE",
    "warning": "STRING_VALUE",
    "danger": "STRING_VALUE",
    "light": "STRING_VALUE",
    "dark": "STRING_VALUE",
  },
  "sass": "STRING_VALUE", /* Custom SASS configuration to add to the theme */
}
}

```

## /v3/api/system/theme/save

Creates/Edits a theme

### Parameters

See Theme Object. If id is omitted, creates a new Theme

### Result

```

{
  "result": true
}

```

## /v3/api/system/theme/remove

Deletes a theme

### Parameters

```
{
  "id": "STRING_VALUE", /* id to delete */
}
```

### Result

```
{
  "result": true
}
```

## Update

Set configuration for checking for updates

## /v3/api/system/update/load

Returns the update configuration of the local system

### Parameters

```
{}
```

### Result

```
{
  "result":{
    "disable": false, /* disable update check */
    "channel": "stable" | "beta", /* which update channel to query */
    "url": "https://www.starnet.com/auto/upgrade32, /* url to check */
  }
}
```

## /v3/api/system/update/save

Saves the update configuration

### Parameters

See use load result object

## Result

```
{
  "result": true
}
```

## Use

Set Default configurations for configuration options that do not have defaults

### /v3/api/system/use/load

Returns the settings configuration of the local system

#### Parameters

```
{}
```

## Result

```
{
  "result":{
    "theme": "STRING_VALUE, /* Optional Theme id to use */
  }
}
```

### /v3/api/system/use/save

Saves the database configuration of the local system.

#### Parameters

See use load result object

## Result

```
{
  "result": true
}
```

# WWW

Set the local web server's configuration

Changes to this section affect THE CURRENT WEB SERVER ONLY

Changes to this section take effect when the web server is restarted

## File location

This object is not stored in the database. It is always stored locally on the server

```
/usr/lib/fastx/var/config/www.json
```

## /v3/api/system/www/load

Returns the WWW configuration of the local system

## Parameters

```
{}
```

## Result

```
{
  "result":{
    "ca_file": "/path/to/ca/file", /* Path to the certificate's CA file */
    "cert_file": "/path/to/certificate/file", /* Path to the certificate file */
    "key_file": "/path/to/key/file", /* Path to the certificate's private key file
    */
    "pfx_file": "/path/to/pfx/file", /* Path to the PFX file (if ca, cert and key
    not used) */
    "port": 3300, /* WWW port */
    "https": {}, /* HTTPS Options Object */
  }
}
```

## /v3/api/system/www/save

Saves the WWW configuration of the local system.

## Parameters

See client load result object

## Result

```
{  
  "result": true  
}
```

StarNet Communications Corp.  
4677 Old Ironside Drive, Suite 210, Santa Clara, California 95054-1825 • USA  
408.739.0881 • 408.739.0936 • sales@starnet.com • www.starnet.com