



# Switch 2024 Fall

What's new?



# Contents

<b>General</b>	<b>3</b>
Before you upgrade	3
<b>Scripting</b>	<b>3</b>
Improvement - JDF support in getVariableAsString Node.js	3
Improved file clean-up - createPathWithName in Node.js	3
New methods in Node.js	3
Node.js version 20 support	3
<b>App compatibility</b>	<b>4</b>
NPM packages	4
<b>Performance &amp; Error Handling</b>	<b>4</b>
Handling ECONNRESET / Socket hang up errors	4
Resolve hanging of Esbuild.exe process	4
<b>System requirements</b>	<b>5</b>
Windows	5
macOS	5
<b>Bug fixes</b>	<b>6</b>



## General

### Before you upgrade

**We strongly recommend backing up the Switch application data root before starting Switch for the first time after upgrading.**

## Scripting

### Improvement - JDF support in `getVariableAsString` Node.js

The scripting functionality of retrieving variable values within the scope of a job has been extended to include JDF, and to support date format validation.

### Improved file clean-up - `createPathWithName` in Node.js

This function is designed to assist script developers in creating temporary files efficiently. After execution, Switch will automatically detect and remove these temporary files, ensuring a seamless cleanup process.

With this release, the directory is now created in the Switch temp folder instead of the Application data root folder.

### New methods in Node.js

With this release, we are further extending capabilities for script and app developers in the Node.js environment.

These new methods are:

```
connection::getType();
```

```
connection::getFileCount ();
```

For detailed information, please consult the [Switch 2024 Fall Scripting Guide \(Node.js\)](#).

### Node.js version 20 support

Switch 2024 Fall has been updated to Node.js 20, this offers several benefits, including improved performance with the updated V8 engine, enhanced security through the experimental permissions model, and support for new ECMAScript features like `Array.prototype.toSorted()` and `Array.prototype.with()`. Additionally, the built-in test runner is more stable, WebAssembly (WASI)



support is now stable, and various APIs like AbortSignal have been expanded. These updates make Node.js 20 a more powerful and efficient platform for modern development.

## App compatibility

### NPM packages

We recommend app creators to upgrade their NPM packages to the latest version to make sure the Node.js upgrade is not causing any issues.

## Performance & Error Handling

With the 2024 Fall release, we have implemented several improvements that ensure greater performance and reliability. While the Socket hang up error could still occur, its frequency has been drastically reduced. We are committed to continuing to enhance this mechanism in future versions to further improve reliability and stability.

### Handling ECONNRESET / Socket hang up errors

#### What is ECONNRESET?

The ECONNRESET error occurs when a network connection is unexpectedly closed by the peer, often due to client/server issues, network interruptions, timeouts, firewalls, high load, or protocol errors.

In this release, we've updated the underlying agent configurations to avoid ECONNRESET errors by closing the sockets from the client side.

We have added more info logging to get more detailed and actionable information to help diagnose the root cause for the ECONNRESET or Socket hang up error.

Lastly, a delay of 10 seconds has been added between the automatic retries, to prevent premature disconnections and maintain responsiveness.

### Resolve hanging of Esbuild.exe process

Jobs were observed to hang without making progress, with the timer running continuously for hours. Additionally, we received reports of 100% CPU usage and significant system slowdowns. Most of these issues were caused by the esbuild.exe process. These issues have been resolved in this release.



# System requirements

System Requirements changes for Switch 2024 Fall release: macOS 11 is dropped, macOS 15 is now supported.

## Windows

Switch 2024 Fall is compatible with:

- Microsoft® Windows® 10 (64-bit)
- Microsoft® Windows® 11
- Microsoft® Windows® 2012 Server R2 (64-bit)
- Microsoft® Windows® 2016 Server (64-bit)
- Microsoft® Windows® 2019 Server
- Microsoft® Windows® 2022 Server

## macOS

Switch 2024 Fall is compatible with:

- macOS 12 (Monterey)
- macOS 13 (Ventura)
- macOS 14 (Sonoma)
- macOS 15 (Sequoia)

On Intel or on Apple Silicon (Requires manual installation of Rosetta)



## Bug fixes

The following bugs have been fixed:

ENFS-36738	Web portal: not possible to see details from job in checkpoint
ENFS-36707	Security vulnerability question
ENFS-36439	Script expression character limit?
ENFS-36392	Web portal filter refresh issue
ENFS-36306	Proxy module issues
ENFS-35382	XMP evaluate not working
ENFS-34543	Scripting: If flow element has no outgoing connection of specified level, job is discarded
ENFS-34508	If in a function above jobArrived '/' is used, then the jobArrived function is not found.
ENFS-34177	TimerFired Debug Mode Issue
ENFS-34073	Cannot get the list of jobs error (MongoError: Sort exceeded memory limit )
ENFS-34013	Webservices node crashes due to missing app file
ENFS-33469	Invalid task file for Web Portal job
ENFS-36546	Root Proxy Certificate for Switch Application on Windows
ENFS-36539	Debug question
ENFS-36485	JobArrive Debug mode not working in 2024 Spring
ENFS-36382	Scripting (Node.js): Switch not recognizing existing entry point(s) because of using backslash inside entry point code
ENFS-36548	Error triggered in script
ENFS-36673	flowElement.createPathWithName(...) Occasionally deletes folder mid-execution
ENFS-36092	Extracted files from opaque dataset do not show up in job board when original file is deleted
ENFS-35135	Webhooks with URL containing '%' fail
ENFS-34149	Scripted validation of interdepend properties issue
ENFS-36108	Switch web portal refresh bug
ENFS-36533	Packed script shows different behaviour then unpacked script