



# Overview of Open Cloud Mesh Test Suite

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# Overview of Open Cloud Mesh

- Introduction to Open Cloud Mesh
- Features of the OCM Test Suite
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- How the Test Suite Works
- OCM Compatibility Results
- Developer's Guide
- Key Benefits of the OCM Test Suite
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# Introduction to Open Cloud Mesh

- **Interoperability Goals:** Open Cloud Mesh fosters seamless data sharing and integration across diverse EFSS solutions for users.
- **Standardization Efforts:** The initiative aims to establish common protocols enhancing compatibility, user experience, and operational efficiency.
- **OCM Test Suite Importance:** The OCM Test Suite validates compliance and ensures robust interactions among various EFSS platforms effectively.



# Features of the OCM Test Suite



**Cross-Platform Validation:** OCM Test Suite ensures interoperability across different EFSS systems through rigorous cross-platform validation procedures.



**Comprehensive Testing Coverage:** The suite addresses key areas like file sharing, invitations.



**CI Pipeline Automation:** Continuous Integration pipeline automation.

# Key Test Categories



**Login Tests:** Focus on authentication effectiveness, ensuring accurate user verification across diverse EFSS platforms and systems.



**Share Link Tests:** Validate public file sharing capabilities, confirming accessible links function correctly across multiple platforms consistently.



**Invite Link Tests:** Assess collaborative workflows by testing the functionality of invite links.



**Share With Tests:** Validates direct file sharing between users on different EFSS platforms.

## All workflows

OCM Test Invite Link NC v27.1.10 to N...

OCM Test Invite Link NC v27.1.10 to O...

OCM Test Invite Link NC v27.1.10 to o...

OCM Test Invite Link OC v10.14.0 to N...

OCM Test Invite Link OC v10.14.0 to O...

OCM Test Invite Link OC v10.14.0 to o...

OCM Test Invite Link oCIS v5.0.6 to NC...

OCM Test Invite Link oCIS v5.0.6 to OC...

OCM Test Invite Link oCIS v5.0.6 to oC...

OCM Test Login Nextcloud v27.1.10

OCM Test Login Nextcloud v28.0.12

OCM Test Login oCIS v5.0.6

OCM Test Login OcmStub v1.0

OCM Test Login ownCloud v10.14.0

OCM Test Login Seafile v11.0.5

# How the Test Suite Works

- **Dockerized Environments:** Utilizes Dockerized test environments, ensuring isolated and reproducible testing scenarios for reliability and accuracy.
- **End-to-End Testing:** Employs headless Cypress for comprehensive end-to-end tests across platforms, enhancing the fidelity of interactions evaluated.
- **Automation and Reporting:** Integrates CI via GitHub Actions for automated testing; status reporting mechanisms interpret results effectively for stakeholders.

```

(Run Starting)
  Cypress: 13.13.1
  Browser: Electron 118 (headless)
  Node Version: v20.15.1 (/usr/local/bin/node)
  Specs: 1 found (owncloud-v10-to-nextcloud-v27.cy.js)
  Searched: cypress/e2e/invite-link/owncloud-v10-to-nextcloud-v27.cy.js
  Experiments: experimentalOriginDependencies=true

Running: owncloud-v10-to-nextcloud-v27.cy.js

Invite link federated sharing via ScienceMesh functionality for ownCloud to Nextcloud
  ✓ Send invitation from ownCloud v10 to Nextcloud v27 (4155ms)
  ✓ Accept invitation from ownCloud v10 to Nextcloud v27 (8687ms)
  ✓ Send ScienceMesh share <file> from ownCloud v10 to Nextcloud v27 (5562ms)
  ✓ Receive ScienceMesh share <file> from ownCloud v10 to Nextcloud v27 (11499ms)

4 passing (37s)

(Results)

Tests: 4
Passing: 4
Failing: 0
Pending: 0
Skipped: 0
Screenshots: 0
Video: true
Duration: 36 seconds
Spec Ran: owncloud-v10-to-nextcloud-v27.cy.js

(Video)
- Started compressing: Compressing to 32 CRF
- Finished compressing: 5 seconds
- Video output: /ocm/cypress/videos/owncloud-v10-to-nextcloud-v27.cy.js.mp4

(Run Finished)

Spec                                Tests  Passing  Failing  Pending
  ✓ owncloud-v10-to-nextcloud-v27.cy.js  00:36    4        4        -
  ✓ All specs passed!                    00:36    4        4        -

```

## Share Link Tests 🔗

Tests the ability to create and manage public links for file sharing, and their integration into EFSS platforms.

Sender (R) / Receiver (C)	Nextcloud v27.1.10	Nextcloud v28.0.12	ownCloud v10.14.0
Nextcloud v27.1.10	passing	failing	passing
Nextcloud v28.0.12	passing	failing	passing
ownCloud v10.14.0	failing	failing	passing

## Share With Tests 🍌

Validates direct file sharing between users on different EFSS platforms, ensuring seamless collaboration.

Sender (R) / Receiver (C)	Nextcloud v27.1.10	Nextcloud v28.0.12	OcmStub v1.0.0	ownCloud v10.14.0	Seafile v11.0.5
Nextcloud v27.1.10	passing	failing	passing	passing	Impossible
Nextcloud v28.0.12	failing	failing	passing	failing	Impossible
OcmStub v1.0.0	Possible	Possible	passing	Possible	Impossible
ownCloud v10.14.0	passing	passing	passing	passing	Impossible
Seafile v11.0.5	Impossible	Impossible	Impossible	Impossible	passing

## Invite Link Tests 📧

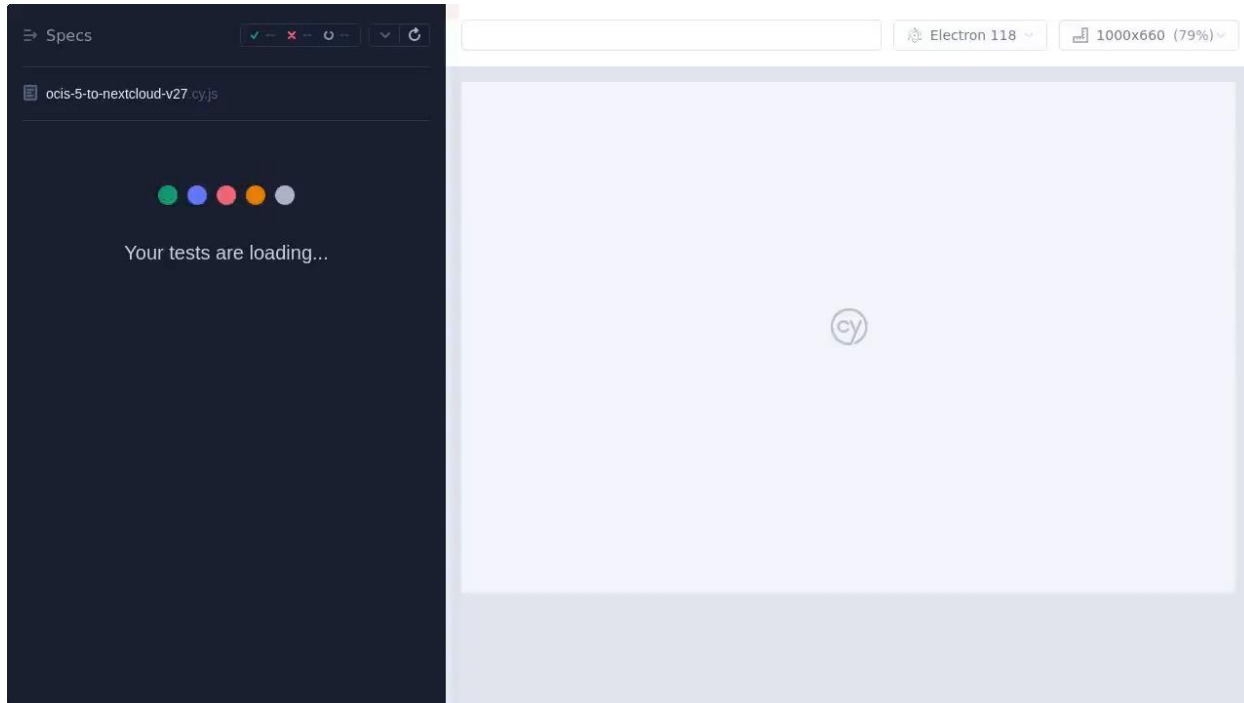
Checks workflows for sending and accepting invitations to collaborate between external users or organizations.

Sender (R) / Receiver (C)	Nextcloud v27.1.10 with ScienceMesh	oCIS v5.0.6	ownCloud v10.14.0 with ScienceMesh
Nextcloud v27.1.10 with ScienceMesh	passing	failing	passing
oCIS v5.0.6	passing	passing	passing
ownCloud v10.14.0 with ScienceMesh	passing	passing	passing

# OCM Compatibility Results

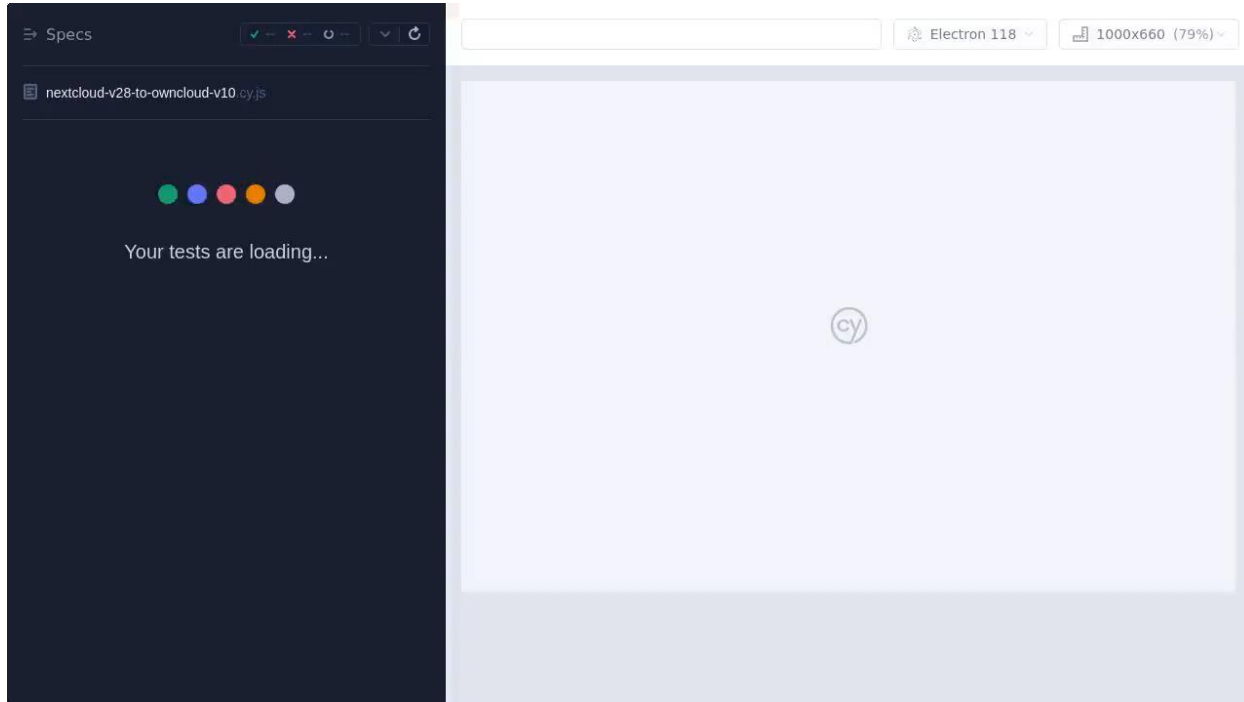
- **Test Results Summary:** The slide provides a concise overview of various tests conducted on system functionalities and performance.
- **Badge Interpretation:** Explains test result badges: success indicates correctness, failure signifies issues, and in-progress needs attention.
- **Visual Test Examples:** Includes graphical representations of test outcomes to enhance understanding and clarity of the results presented.

# Invite Flow Test oCIS to Nextcloud

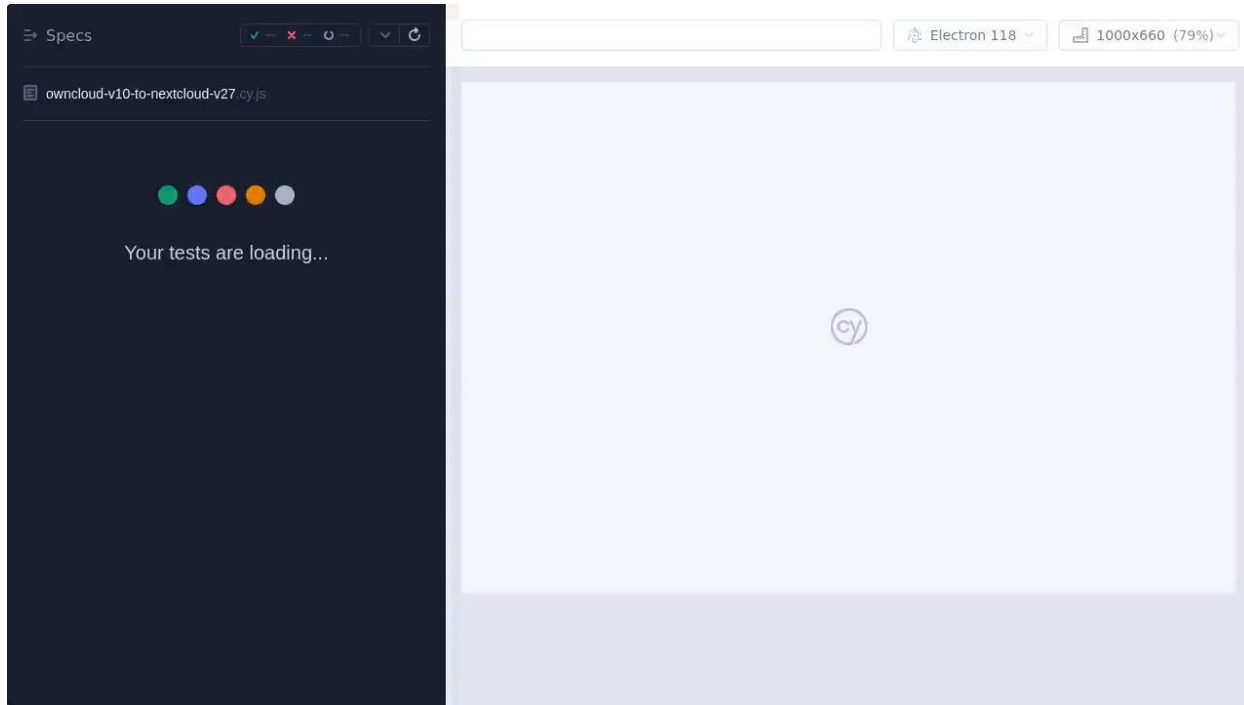




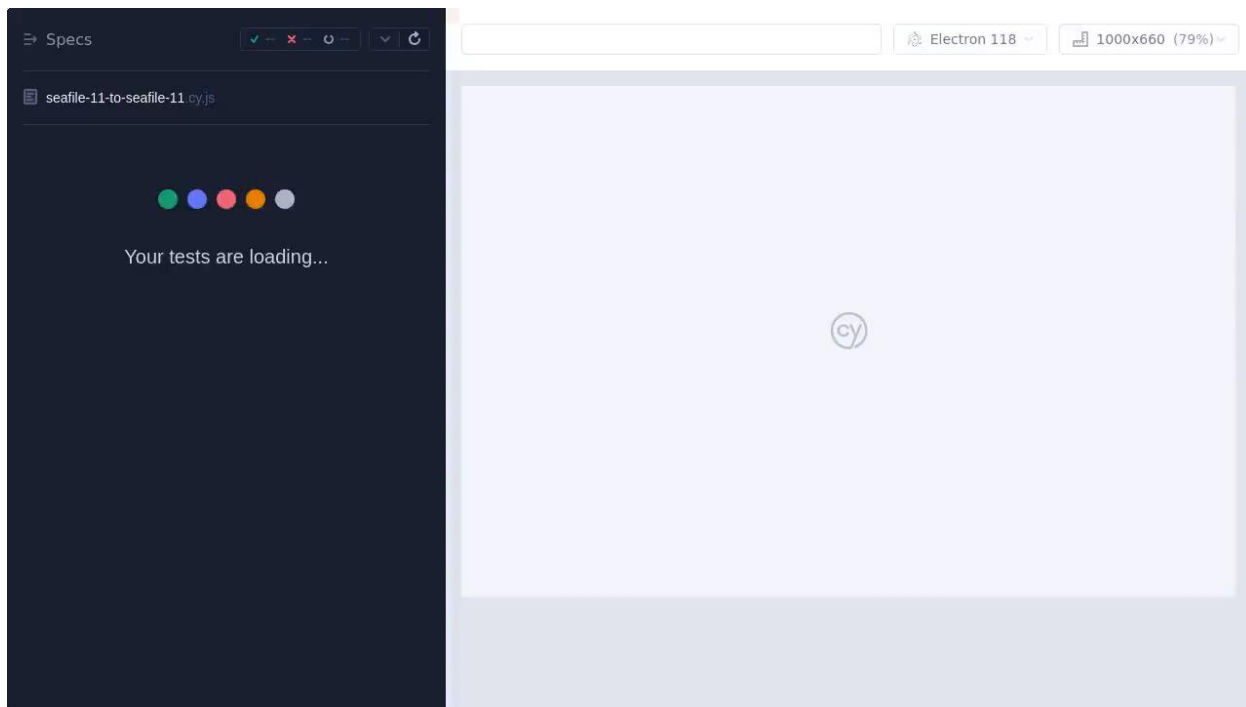
# Share Public Link Nextcloud to ownCloud



# Share With flow ownCloud to Nextcloud



# Share With Seafile to Seafile



# Developer's Guide

- **CLI Command Overview:** Provides insights into available CLI commands for running tests within the OCM Test Suite effectively.
- **Command Usage Examples:** Illustrates various test scenarios using specific CLI commands reflective of typical use cases implemented.
- **Argument Breakdown:** Details essential command arguments, explaining their functions to optimize test execution and outcomes.

## Command Syntax

To run specific tests, use the following command syntax:

```
./dev/ocm-test-suite.sh [test scenario] [platform 1] [platform 1 version] [run mode] [cypress runner]
```

### Arguments Breakdown:

1. **Test Scenario:**
  - The type of test you want to run. Supported scenarios:
    - a. `login`
    - b. `share-with`
    - c. `invite-link`
    - d. `share-link`
2. **Platform 1:**
  - The first EFSS platform being tested. Supported platforms:
    - a. `nextcloud`
    - b. `owncloud`
    - c. `seafile`
    - d. `ocis`
3. **Platform 1 Version:**
  - The specific version of Platform 1. For example: `v27.1.10`.
4. **Run Mode:**
  - Defines the environment for the test execution:
    - a. `dev`: Local development mode.
    - b. `ci`: Continuous Integration mode.
5. **Cypress Runner:**
  - The browser to be used by the Cypress test runner:
    - a. `electron` (default for headless mode)
    - b. `chrome`
    - c. `firefox`
    - d. `edge`
6. **Platform 2 (Optional):**
  - The second EFSS platform involved in cross-platform scenarios. Supported platforms:
    - a. `nextcloud`
    - b. `owncloud`
    - c. `seafile`
    - d. `ocis`
7. **Platform 2 Version (Optional):**
  - The specific version of Platform 2. For example: `v28.0.12`.

# Key Benefits of the OCM Test Suite

- **Ensuring Interoperability:** The OCM Test Suite guarantees seamless interoperability across EFSS platforms, supporting standardized operations and integrations.
- **Compliance Facilitation:** Facilitates adherence to OCM standards, ensuring that platforms meet necessary compliance requirements for effective operations.
- **Real-Time Validation:** Provides real-time validation during development processes, assisting developers in promptly identifying compatibility issues.

# Call to Action

- **Get Involved with OCM:** Engage in the OCM initiative by volunteering for testing, discussions, and contributing insights to enhance interoperability.
- **Testing Participation Opportunities:** Organizations can participate in testing activities, validating cross-platform functionalities, ensuring OCM's success and adaptability.
- **Join OCM Discussions:** Participate in discussions aimed at refining OCM standards, sharing perspectives to foster collective advancements across EFSS systems.