How to Enable CORS Validation

Nx Support
2 months ago · Updated

By default, the Media Server uses a **Standard** security level with a permissive Cross-Origin Resource Sharing (CORS) policy. This ensures broad compatibility with third-party integrations and embedded clients.

However, this carries a security trade-off: a malicious web page visited by an authenticated user could potentially access session data. **Enabling strict CORS validation** restricts the server to prevent this class of attack.

Security Levels

When configuring the Media Server, you can choose between two security levels:

- **Standard (Default):** Permissive; the server reflects any `Origin` header. This is compatible with all integrations but disables strict CORS protection.

- **High (Strict):** Restrictive; the `Origin` header is validated. This prevents unauthorized cross-origin session access but may impact some third-party integrations.

New Installations

You can enable CORS protection during the initial setup wizard by selecting **High** in the **Advanced Site Settings**.

- **Via WebAdmin:** During "Setup New Site," select **Advanced Site Settings** and set the **Security level** dropdown to **High**.
- **Via Desktop Client:** In the "Get Started" dialog, select **Advanced system settings** and set the **Security Level** to **High**.

Existing Installations (API Method)

For systems already in production, you can toggle strict CORS validation by updating the `supportedOrigins` site setting via the **WebAdmin** or the **REST API**.

WebAdmin method

1. Navigate to the hidden Advanced settings of the **WebAdmin** via: `https://<serverIp>:7001/#/settings/advanced`
2. Scroll down till you find the **HTTP header: Origin** `supportedOrigins` setting.
3. Enter `null` to Enable Strict CORS Validation or `*` to Disable Strict CORS Validation:

Enabled Strict CORS Validation:

Disabled Strict CORS Validation:

REST API method

1. Enable Strict CORS Validation

To activate strict protection, send a `PATCH` request to set the supported origins to **null**. This prevents the server from reflecting untrusted origins in the `Access-Control-Allow-Origin` header.

Request: `PATCH /rest/v4/site/settings`

Body:

```
{
  "supportedOrigins": "null"
}
```

2. Disable Strict CORS Validation (Revert)

To return to the standard permissive behavior, set the value to a wildcard (*****).

Request: `PATCH /rest/v4/site/settings`

Body:

```
{
  "supportedOrigins": "*"
}
```

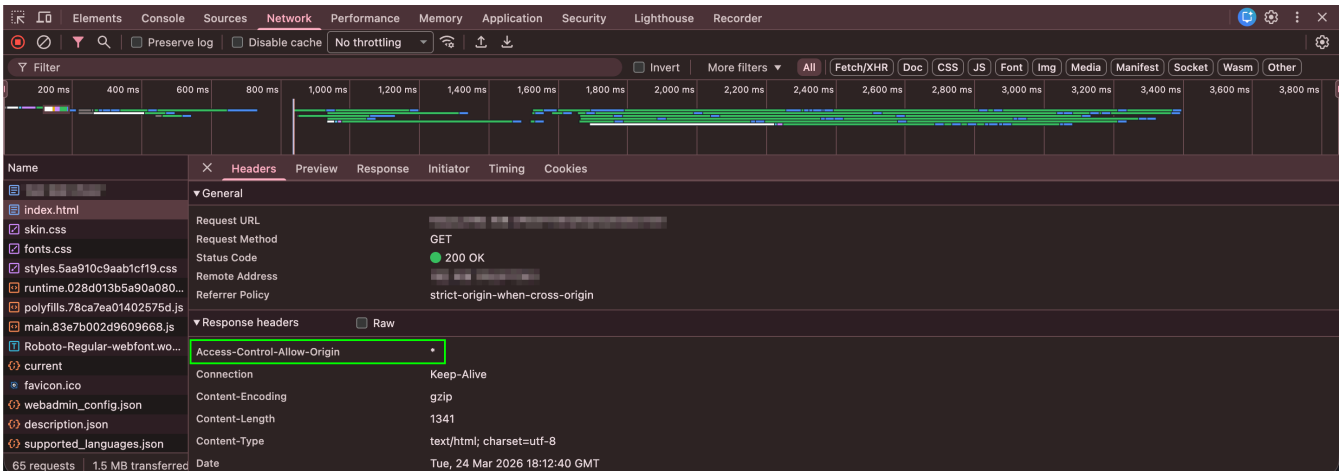
NOTE: Before sending the `PATCH` request to `/rest/v4/site/settings`, you must obtain a **fresh bearer token** by authenticating via the `/rest/v4/login/sessions` endpoint.

Verification

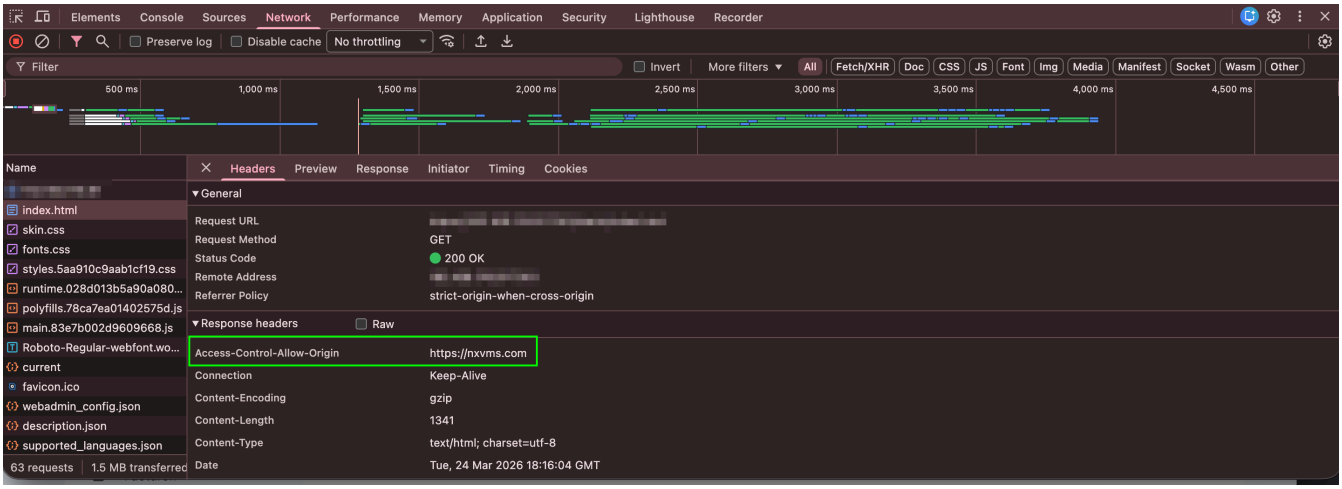
To verify the change using your browser, follow these steps:

1. Open the **WebAdmin** page
2. **Open Developer Tools**: Press **F12** (or **Ctrl+Shift+I**) and select the **Network** tab.
3. Refresh the **WebAdmin** page.
4. **Inspect the Call**: for example the `index.html` page
5. **Check Response Headers**: Look for the **Headers** (or **Response**) sub-tab and locate `Access-Control-Allow-Origin`.

CORS validation disabled:



CORS validation enabled:



Compatibility Considerations

Before applying the **High** security level or setting `supportedOrigins` to `null`:

- **Audit Integrations:** Identify any web-based dashboards or embedded clients that call the API from a different domain.
- **Test in Staging:** Ensure that legitimate cross-origin requests are not blocked.
- **Explicit Allowlist:** If you have a specific trusted domain that requires access, contact your administrator to configure a specific origin instead of using `null`.

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