Checking the Admin Role in UI Builder evaluateProperty

There are two main ways to check a user's roles in a UI Builder scripted property: (a) **preloading the data** (e.g. via session context or a UI Builder Data Resource) and checking it locally, or (b) **fetching roles on-the-fly** via a server call (e.g. using api.getData). Below we outline both approaches with sample code and discuss their trade-offs.

1. Preloaded Data Resource (Client-side check)

UI Builder automatically provides the session user's info (including roles) in the context. You can use that directly in your evaluateProperty . For example, the following script reads the roles array from api.context.session.user.roles and checks for 'admin':

```
function evaluateProperty({ api, helpers }) { // Approach 1: use preloaded session data /
data resource // This assumes a Data Resource (or the session context) has already loaded
the current user's roles. const roles = api.context.session.user.roles; // e.g.
['admin','itil_user'] return Array.isArray(roles) && roles.includes('admin'); // true if
'admin' is present }
```

Here api.context.session.user.roles is an array of role names for the logged-in user, made available by UI Builder servicenow.com. (Alternatively, you can create a *Data Resource* on, say, the sys_user_has_role table filtered by the current user, and then use api.data.myUserRoles to read those records.) For instance, if you define a Data Resource named userRoles that queries sys_user_has_role for the current user, the code would be:

```
function evaluateProperty({ api, helpers }) { const userRoles = api.data.userRoles; //
preloaded records from sys_user_has_role // Each record has a .role.name field. Check if
any record's role is 'admin'. return userRoles && userRoles.some(r => r.role.name ===
'admin'); }
```

Using preloaded data (context or Data Resources) means the roles are fetched **before** rendering. UI Builder Data Resources "fetch data from the instance to the page" and make it available to components developer.servicenow.com. This lets you check the role locally without a new network call in the property script.

2. Server-side Synchronous API Call

The alternative is to call the server at evaluation time. For example, you could invoke the Table API via api.getData. The script might look like this:

```
function evaluateProperty({ api, helpers }) { // Approach 2: synchronous server call
inside evaluateProperty const userId = api.context.session.user.sysId; // Query
sys_user_has_role for current user & 'admin' role const result =
api.getData('sys_user_has_role', { sysparm_query: `user=${userId}^role.name=admin` }); //
If any records returned, the user has the 'admin' role return (result.records ||
[]).length > 0; }
```

This code uses api.getData (a UI Builder API) to synchronously query the sys_user_has_role table for the current user's admin role. If the query returns one or more records, the user has the admin role. (You could also use a Script Include or Transform Data Resource on the server and call it similarly.)

Comparison: Preloaded Data vs. Runtime API Call

- Performance: Preloading roles (via context or a UI Builder Data Resource) is generally faster. UI Builder can cache and reuse data "multiple components can hook into a shared state" so data is fetched only once servicenow.com. In contrast, an api.getData call runs at evaluation time and blocks the UI until the server responds, which can slow page load or cause flicker. Data Resources are designed to "de-dupe data and only fetch it once" servicenow.com, whereas ad-hoc calls in evaluateProperty bypass those optimizations.
- **User Experience:** With preloaded data, the UI can render immediately using the already-loaded roles. The synchronous approach may delay component rendering or require additional loading states. A blocking call in evaluateProperty could make the page feel sluggish, especially if done repeatedly.
- Best Practices: ServiceNow recommends using Data Resources and binding data over custom scripting whenever possible. UI Builder's architecture encourages separating data fetching from presentation developer.servicenow.com servicenow.com. Fetching data in a scripted property is allowed but should be minimized. In particular, avoid heavy or repeated server calls in evaluateProperty. Instead, leverage the built-in session context or a preconfigured data resource.
- Security & Reliability: Both methods respect security (user can only see roles they have). Preloading via
 the session context or data resource uses ServiceNow's standard access controls. A custom script call
 could likewise enforce ACLs. However, adding custom server calls introduces more moving parts (REST
 APIs, query correctness, error handling).

Key takeaway: the *preloaded data* method (solution 1) is cleaner and more performant. For example, the UI Builder community shows using api.context.session.user.roles.includes('admin') directly servicenow.com. Using Data Resources also aligns with the UI Builder model of centralizing data fetch logic developer.servicenow.com servicenow.com. The runtime API call (solution 2) works, but should be used sparingly since it negates those built-in optimizations.

Recommendation: For production use, prefer the data-resource (or session context) approach. Define a user-roles resource or use api.context.session.user.roles and check includes('admin'). This leverages UI Builder's asynchronous data loading and caching servicenow.com. Use the direct server call approach only if absolutely necessary (e.g. no other way to get the data), and be mindful of the performance impact.

References: The examples above follow documented patterns in UI Builder for accessing user roles servicenow.com and for using data resources to fetch instance data developer.servicenow.com servicenow.com. These sources explain that UI Builder data resources are optimized for single-fetch, shared use cases, whereas custom script calls run at evaluation time.

Citations

- Solved: Hide a component on workspace based on role ServiceNow Community
 https://www.servicenow.com/community/developer-forum/hide-a-component-on-workspace-based-on-role/m-p/2357022
- Ul Builder Data Resources
 https://developer.servicenow.com/blog.do?p=/post/quebec-ui-builder-data-resources/
- All About Data Resources in UI Builder ServiceNow Community
 https://www.servicenow.com/community/next-experience-articles/all-about-data-resources-in-ui-builder/ta-p/2360643