

# Ticket #46

Clarify error responses and allow  
non-HTTP error codes

# General Recommendations for REST

- Include the HTTP status code for clients that can't read this from the response.
- Include a provider specific error code for more granular error information.
- Include a human-readable error that can be presented to an end user.
- Include a detailed error that can be used by a developer to diagnose the problem.
- Include links to online resources with more information about the error.

<http://soabits.blogspot.com/2013/05/error-handling-considerations-and-best.html>  
<https://tools.ietf.org/html/draft-nottingham-http-problem-04>

# Recommendation: Use Problem Details

- Pros
  - Includes user and developer information in title (required) and detail (optional) fields.
  - Includes HTTP status code (optional) in `httpStatus` field.
  - Includes provider-specific status code (required) in `problemType` field.

# Recommendation: Use Problem Details

- Cons
  - SCIM requires HTTP status code, but this is optional in Problem Details.
    - SCIM may wish to dictate that this is required.
  - The `problemType` field is required and is defined as:  
"An absolute URI [RFC3986] that identifies the problem type. When dereferenced, it SHOULD provide human-readable documentation for the problem type (e.g., using HTML)."
    - It is a nice feature to make this dereferenceable, but could be seen as an imposition on some service providers.

# Example

```
HTTP/1.1 401 Unauthorized
Content-Type: application/api-problem+json
Content-Language: en
```

```
{
  "problemType": "http://example.com/errors/insufficient-access",
  "title": "You do not have the required
permissions to create a new user.",
  "detail": "Creating a user requires
RIGHT_CREATE_USER."
}
```

Provider-specific code

User-friendly message

Developer friendly message

Note: This is now single-valued instead of multi-valued. Multi-valued errors are typically used to communicate errors per field in a request.