# NSI Error codes

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#### **Error codes**

I think the current set by John and me are fairly good More feedback would be nice though

Unclear how to handle downstream errors

Propagate them up, abstract them, list them To some extent this can be abstracted away, but only some Potentially important for error recovery Did the NSA fail, or did something else fail, how did it fail What to do when multiple things fail

Options:

List of errors

Error code for downstream error + downstream error code

## **Error code hierarchy**

Error list probably isn't complete

- I suggest making an error hierarchy
- Purpose is to have some semi-generic error codes for the future
- Still only one error code but can be generalized

## **Error codes hierarchy**

PAYLOAD_ERROR		00100
MISSING_PARAMETER		00101
NOT_IMPLEMENTED		00102
CONNECTION_ERROR		00200
INVALID_TRANSITION		00201
CONNECTION_EXISTS		00202
CONNECTION_NONEXISTENT		00203
CONNECTION_GONE		00204
SECURITY_ERROR		00300
UNAUTHORIZED		00301
TOPOLOGY_ERROR	00400	
UNKNOWN_STP		00401
STP_RESOLUTION_ERROR		00402
NO_PATH_FOUND		00403
INTERNAL_ERROR		00500
INTERNAL_NRM_ERROR		00501
RESOURCE_UNAVAILABLE	00600	
STP_UNAVALABLE		00601
BANDWIDTH_UNAVAILABLE		00602

## **Hiararchial error codes explained**

So the idea is:

SECURITY\_ERROR 00300 UNAUTHORIZED 00301

If we introduce a new security error code (00302) An implementation can generalize it into 00300, if it doesn't know it

## **Decision Points**

How do we report downstream errors?

Are the current error codes enough?

Should we have a hierarchy/groups of errors?