GET CONFIGURATION Overview

• History
  – Inquiry
  – Opcode reporting

• Needs for new behavior
  – More complex devices
  – Dynamically changing devices
  – Monolithic drivers

• Proposal
Inquiry command

• Static page
  – Difficult to determine current operating state
• Coarse device definition
  – Difficult to determine supported operation
 Opcode Reporting

• Simple lists of supported codes are not useful
  – Lists supported opcodes
  – May not list supported subfields
  – Does not list supported behavior (e.g. the command sets for rewritable and write once media are nearly identical, but cannot be used in the same way)
Complex devices

- Product differentiation is dictating similar but not identical features
- Host drivers need to control base functions
- OEMs need to add control for custom features
Dynamically changing devices

- Removable medium devices are supporting a growing variety of media per device
- Different media may have widely varying support
- Systems can’t reliably control new devices
- Drivers that control more than one device type are difficult
GET CONFIGURATION proposal

- Lists “atomic” sets of functionality
- List is dynamic
- Can be coupled to the Persistent Prevent/Get Event Status Notification mechanism
- Expandable
- Definition can be distributed across command set documents
- Based on current definitions for devices
Features

• Full definition of behavior
  – Commands
    ✷ Fields within commands
    ✷ Command behavior
  – Mode Pages
    ✷ Fields within pages

• Previously defined in other documents as either Features or Models
  – Simply provides a reporting mechanism
  – Definition remains in the standard
Feature Descriptors

- Standard format
- Can contain parameters
- Has versioning per Feature
- Describes and differentiates:
  - Features that exist
  - Features that are active