
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