# OpenC2 Working Group Decision Construct 02/04/2016

## **Proposed**:

Add universal UNDO action to reverse any previously issued command

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| **Affirmative Construct** | **Negative Construct** |
| * Convenient means to cancel an action * Due diligence requires ability to recover from an action to a known good state | * Requires significant level of state to be maintained * Not scalable/ implementable for inter-domain C2 * Commands are appended as contextual information is acquired tracking all commands complex * Not applicable to many actions |
| **Negative Rebuttal** | **Affirmative Rebuttal** |
| * The lack of applicability for some commands (such as DETONATE) does not invalidate UNDO for all commands * A network defense system should maintain state anyway, so the UNDO command should not be an undue burden | * Potentially complex undo procedures, thus NOT convenient means to cancel actions * The lack of the UNDO command does not preclude the implementation of recovery, simply does not require explicit action * Not actually universal: UNDO/STOP, UNDO/DETONATE * Specific “undo-like” OpenC2 actions already defined |
| **Resolution** | |
| Returning to known good states and maintenance of history is left to the implementer and a universal UNDO should not be included in the command set. | |
| **Minority Report** | |
| A universal UNDO command should be included to that implementers have a convenient means to return to a known good state. | |