

INTELLIGENCE COMMUNITY
INFORMATION INTEGRATION
& MANAGEMENT

ICS Password Management

Policy Background Briefing



Connect. Integrate. Collaborate.

Cyber Program Manager
IC Information Assurance
Office of the IC CIO

04 May 2010

CREATE DECISION ADVANTAGE

Accurate as of
16 June 2009



ICS Password Management History/Background

- **ICS Password Management establishes criteria for managing all passwords used on any IC IT resource.**
- **No community consensus**
- **Recommendation for CIO Council to resolve**
- **Outstanding Issues**
 - Minimum password length: 8 or 12 characters?
 - Maximum password age: 180 or 60 days?



Comments Received

(b)(1)
(b)(5)

Agency	Forum	Comments
[Redacted Content]		



Issue 1: Minimum Password Length

- **Alternative A: 8 characters**
 - Pros: Easier to remember.
 - Cons: Easier to guess/brute-force attack. Not consistent with FDCC.
- **Alternative B: 12 characters**
 - Pros: Harder to guess/brute-force attack. Consistent with FDCC.
 - Cons: Difficult to remember.



Issue 1: Minimum Password Length

(b)(1)
 (b)(5)

	Current Draft	FDCC
Minimum Password Length	8 characters	12 characters

PL = Password Length CS = Character Set	Password Cracking* (based on 3 CS)	# of Password Combinations (CS ^ PL)
PL = 8 CS = 94	0.001 days (roughly a minute and half)	6,095,689,385,410,816
PL = 12 CS = 94	18,671 days	475,920,314,814,253,376,475,136

* Source SANS Institute: <http://blogs.sans.org/windows-security/2009/06/12/how-to-crack-a-password-spreadsheet>



Issue 2: Maximum Password Age

- **Alternative A: 180 days**
 - Pros: Easier for users.
 - Cons: Not consistent with FDCC.
- **Alternative B: 60 days**
 - Pros: Consistent with FDCC.
 - Cons: Annoying to users. Higher support costs (i.e. Help Desk).

(b)(1)
(b)(5)

	Current Draft	FDCC	
Maximum Password Age	180 days	60 days	



Comparison Summary

(b)(1)
(b)(5)

	Draft ICS 500-16	FDCC	
Password Length	12	12	
Password Age	180 days	60 days	
Password Requirements	3 of 4 character classes	3 of 4 character classes	
Password reuse			



ICS Password Management

- **Recommendation:**

(b)(5)

