Rules: September 2022 Edition





SC-28 PROTECTION OF INFORMATION AT REST

Protect the [Selection (one or more): confidentiality; integrity] of the following information at rest: [Assignment: organization-defined information at rest].

RMF 800-53 Search



SC-28 PROTECTION OF INFORMATION AT REST

- What do we protect and how do they relate?
- What do confidentiality, integrity, and availability mean?
- How do we define encryption?
- How and where do we encrypt at rest?



Control: What and why you protect the C.I.A of systems and information. (high-level)

Method: How you act to analyze evidence of control's requirements. (high-level)

Rule: What aspect of a part of system you evaluate. It may or may not relate to a control. (granular)

Test: How do you specifically evaluate an aspect of a rule. It may or may not relate to a method for analyzing if control requirements are met. (granular)



Who does what?

Is it always the same people?



Caroline Component Supplier

- Works in SuperCSP security team to:
 - oversee security monitoring for stakeholders and customers
 - document secure configuration for customers
- Needs structured info to:
 - accelerate customers secure configuration
 - provide structured test procedures to quickly test configuration



Evelyn Evaluator

- Works at EvaluatorCorp and writes:
 - hardening guidelines for SuperCSP and open-sources software
 - automated tools to test for hardening guidelines
- Has tools and guidelines disconnected from assessment
- Needs tools and guidelines connected to assessment



Dina Developer

- Works at BigCorp to:
 - develop a BigCorp SaaS product built with SuperCSP services
 - design and implement with security in mind
 - maintain parts of SSPs for BigCorp services
 - provide updated technical evidence of SSPs requirements



Owen System Owner

- Works at BigCorp to:
 - act as business owner of a BigCorp SaaS product
 - scope assessments for authorizations
 - approve and owns product documented in SSP
 - sponsor BigCorp's authorization of product for customer use



Arthur Architect

- Works at BigCorp to:
 - guide developer teams to design systems well
 - lead developer teams of different products to build a combined BigCorp architecture
- Needs to scale best practice to developers for architecture
- Needs methods for developers to test products for best practice



Oscar Operations

- Works at BigCorp to:
 - maintain a BigCorp SaaS product
 - manage product security monitoring program
 - oversee product vulnerability management program
- Needs automatable ways to generate evidence
- Needs repeatable ways to summarize evidence for management
- Needs to respond to POA&M inquires from management



Andy Assessor

- Works at AssessorCorp to:
 - consult with customers like BigCorp on security
 - advise on regulatory compliance
 - apply expertise in risk and security management
 - understand challenges and solutions for heterogenous architectures
 - analyze customers and recommend actionable improvements
- Needs better ways to parallelize repeat tasks



Not All Personas Are Equal

- Personas are not always consistent, persistent
- Some real-world roles blend personas (DevOps)
- Some personas exist all in one organization, sometimes in 2 or 3
- The persona's role in organization(s) changes how they interact with:
 - rules
 - tests
 - bindings of rules and tests
 - linkage to controls' or control statements' requirements as evidence



Caronline Component Supplier

- "I understand SuperCSP products and write rules for them."
- "Customers ask us about other tools for security testing, I need to show the customer how to relate our tests as evidence to their rules."
- "I understand SuperCSP tools for tests."
- "Some customers use our rules for hardening but want to use their own tools to test. I need to show them how they relate."



Evelyn Evaluator

- "I document hardening guidelines for EvaluatorCorp also using commercial and governmental standards."
- "I know all the EvaluatorCorp tests. I can add them to a componentdefinition."
- "Sometimes I know how to bind rules and tests together for EvaluatorCorp. Otherwise only the customer can know."



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         [0 to ∞]
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</component-definition>
```



```
▼ <component-definition uuid="uuid"> [1]
  ▶ <metadata> ... </metadata> [1]
  ▶ <import-component-definition href="uri-reference"/> [0 to ∞]
  ▶ <rule uuid="uuid"> ... </rule> [0 to ∞]
  ▼ <test uuid="uuid"> [0 to ∞]
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      [0 to ∞]
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  ▶ <capability uuid="uuid" name="string"> ... </capability> [0 to ∞]
  ▶ <back-matter> ... </back-matter> [0 or 1]
</component-definition>
```



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</component-definition>
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         A choice of:
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             ▶ <prop name="token" uuid="uuid" ns="uri" value="string" class="token"
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               [0 or 1]
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       ▶ <remarks>markup-multiline</remarks> [0 or 1]
```



Questions? Comments?

github.com/usnistgov/OSCAL/issues/1058

gitter.im/usnistgov-OSCAL/Lobby

oscal@nist.gov

