
DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems

Sprint 2 Task Status Details Report

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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems

Report Contents

Rank	ID	Name	State	Plan Est	Task Est	To Do	Discussion Count	Owner
				66.5	66.5	66.5		
	US23	Capture a Packge of Raw Authenication Results	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C <input type="checkbox"/> A	28.5	28.5	28.5	0	Stephen
	TA43	Create Stub for Password Capture	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	2.0	2.0	2.0	0	Allen
	TA44	Create Stub for AT&T Voice call	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	3.0	3.0	3.0	0	Allen
	TA45	Create Stub for second biometric call	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	4.0	4.0	4.0	0	Allen
	TA46	Create Stub for SMS Message Check call	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	1.5	1.5	1.5	0	Allen
	TA47	Create Stub for Challenge Question call	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	2.0	2.0	2.0	0	Allen
	TA48	Execute raw authentication results capture sequence	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	8.0	8.0	8.0	0	Allen
	TA18	Save raw authentication results to data file.	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	8.0	8.0	8.0	0	Allen
	US29	Generate Test/Use Cases by Multiplexing Environmental Factors	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C <input type="checkbox"/> A	16.0	16.0	16.0	0	Stephen
	TA55	Clone a baseline case many times with different permutations of environment factors	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	16.0	16.0	16.0	0	Allen
	US19	Process a Single Batch Test/Use Case	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C <input type="checkbox"/> A	18.0	18.0	18.0	0	Stephen
	TA57	Create stub for RMM call	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	4.0	4.0	4.0	0	Allen
	TA64	Create stub for threshold calculator	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	2.0	2.0	2.0	0	Allen
	TA39	Accept scenario input and run through processing	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	8.0	8.0	8.0	0	Allen
	TA58	Save test results to output file	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	4.0	4.0	4.0	0	Allen
	US18	Batch Processing of All Test/Use Cases	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C <input type="checkbox"/> A	4.0	4.0	4.0	0	Stephen
	TA38	Loop through use/test case dataset and run each through processing.	<input type="checkbox"/> D <input type="checkbox"/> P <input type="checkbox"/> C	4.0	4.0	4.0	0	Allen

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US23: Capture a Package of Raw Authentication Results	
General	
ID:	US23
Name:	Capture a Package of Raw Authentication Results
Tags:	
Description:	<p>As an Experimental Tester, I need to capture a full set of authentication scores so that we can build up test cases for RMM processing and analysis</p> <p><i>The Experimental Tester needs to launch the bench and invoke the "capture raw authentication data" function. The tester will be asked to complete each of the authentication procedures that we will be investigating, and the full set of authentication scores will be stored.</i></p> <p><i>In this coding iteration, the authenticators will be represented by "stubs". In the next sprint, stubs will be replaced with "real" code.</i></p>
Attachments:	
Owner:	Stephen
Hierarchy	
Parent:	US20: (EPIC) Capture Baseline Data
Schedule	
State:	Defined
Blocked:	false
Ready:	false
Blocked Reason:	
Iteration:	Sprint 2
Plan Est:	28.5 Points
Task Est:	28.5 Hours
To Do:	28.5 Hours
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TA43: Create Stub for Password Capture	
General	
ID:	TA43
Name:	Create Stub for Password Capture
Tags:	
Description:	<p><i>Put up a screen for password information capture (not necessarily "ask for password"; more likely, "ask for password age, complexity, number of fails, etc.", but don't really process input. Return some fixed value.</i></p>
Attachments:	
Owner:	Allen
Task	
State:	Defined
Blocked:	false
Ready:	false
Blocked Reason:	

Estimate: 2.0 Hours
To Do: 2.0 Hours
Work Product: US23: Capture a Packge of Raw Authenication Results
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA44: Create Stub for AT&T Voice call**

General

ID: TA44

Name: Create Stub for AT&T Voice call

Tags:

Description: *More than a true stub actually...*

Create a screen that will ask for a phone number to use when the AT&T call is eventually in place, a "launch" button that will eventually trigger the AT&T authenticator. A set of fields that will allow manual input of results will also be provided. For the first pass, these values are the "stub" returns. Eventually, they will permit override in the event the real authenticator is not working.

Attachments:

Owner: Allen

Task

State: Defined

Blocked: false

Ready: false

Blocked Reason:

Estimate: 3.0 Hours

To Do: 3.0 Hours

Work Product: US23: Capture a Packge of Raw Authenication Results

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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA45: Create Stub for second biometric call**

General

ID: TA45

Name: Create Stub for second biometric call

Tags:

Description: *Create a screen that will place, a "launch" button that will eventually trigger the biometric authenticator. A set of fields that will allow manual input of results will also be provided. For the first pass, these values are the "stub" returns. Eventually, they will permit override in the event the real authenticator is not working.*

NOTE: WE NEED TO IDENTIFY THE AUTHENTICATOR BEFORE WE GET TO THIS TASK!

Attachments:	
Owner: Allen	
Task	
State: Defined	Blocked: false
Ready: false	Blocked Reason:
Estimate: 4.0 Hours	
To Do: 4.0 Hours	
Work Product: US23: Capture a Packge of Raw Authenication Results	
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA46: Create Stub for SMS Message Check call**

General

ID: TA46
Name: Create Stub for SMS Message Check call
Tags:
Description: <i>Create a screen that will ask for a phone number to use when the SMS Message Check call is eventually in place, a "launch" button that will eventually trigger the SMS Message authenticator. A set of fields that will allow manual input of results will also be provided. For the first pass, these values are the "stub" returns. Eventually, they will permit override in the event the real authenticator is not working.</i>
Attachments:
Owner: Allen
Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 1.5 Hours
To Do: 1.5 Hours
Work Product: US23: Capture a Packge of Raw Authenication Results
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA47: Create Stub for Challenge Question call**

General

ID: TA47
Name: Create Stub for Challenge Question call
Tags:
Description: <i>Create a screen that will ask ask one or more challenge questions and accept answers. For the first pass, these values are the "stub" returns. Eventually, they will permit override in the event the real authenticator is not working.</i>
Attachments:

Owner: Allen
Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 2.0 Hours
To Do: 2.0 Hours
Work Product: US23: Capture a Packge of Raw Authentication Results
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA48: Execute raw authentication results capture sequence**

General

ID: TA48
Name: Execute raw authentication results capture sequence
Tags:
Description: <i>Walk through all of the authenticators (which will initially be stubs, but will eventually be replaced with "real" calls) and capture the results from authenticators.</i>
Attachments:
Owner: Allen
Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 8.0 Hours
To Do: 8.0 Hours
Work Product: US23: Capture a Packge of Raw Authentication Results
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA18: Save raw authentication results to data file.**

General

ID: TA18
Name: Save raw authentication results to data file.
Tags:
Description: <i>Write the complete set of authentication scores to a file. These will be retrieved in a subsequent story and combined with environment parameters to define a test/use case.</i>
Attachments:
Owner: Allen
Task
State: DefinedBlocked: false

Ready: false	Blocked Reason:
Estimate: 8.0 Hours	
To Do: 8.0 Hours	
Work Product: US23: Capture a Packge of Raw Authentication Results	
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**US29: Generate Test/Use Cases by Multiplexing Environmental Factors**

General

ID: US29

Name: Generate Test/Use Cases by Multiplexing Environmental Factors

Tags:

Description: As the **Lead Experimenter**,
I need to **generate test case datasets** from the raw authentication packages
So that we can **perform meaningful analysis** on a sufficiently large result set.

For each package of raw authentication results, we will generate a set of test/use cases by creating permutations of the allowable environment variables and copying the authentication results.

Attachments:

Owner: Stephen

Hierarchy

Parent: US20: (EPIC) Capture Baseline Data

Schedule

State: Defined

Blocked: false

Ready: false

Blocked Reason:

Iteration: Sprint 2

Plan Est: 16.0 Points

Task Est: 16.0 Hours

To Do: 16.0 Hours

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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA55: Clone a baseline case many times with different permutations of environment factors**

General

ID: TA55

Name: Clone a baseline case many times with different permutations of environment factors

Tags:

Description: *For a given baseline case, store many test/use case records using copies of the original authenticator scores, but many different permutations of the environmental factors.*

Attachments:

Owner: Allen

Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 16.0 Hours
To Do: 16.0 Hours
Work Product: US29: Generate Test/Use Cases by Multiplexing Environmental Factors
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**US19: Process a Single Batch Test/Use Case**

General

ID: US19
Name: Process a Single Batch Test/Use Case
Tags:
Description: As an Experimental Tester , I need to be able to initiate the processing of one stored test case so that I can generate test results for later evaluation. <i>This user story focuses focuses on the processing steps required to actually run through a single batch-mode use/test case. (Another story will worry about triggering the full set of stored cases.)</i>
Attachments:
Owner: Stephen
Hierarchy
Parent: US21: (EPIC) Tune Thresholds
Schedule
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Iteration: Sprint 2
Plan Est: 18.0 PointsTask Est: 18.0 Hours
To Do: 18.0 Hours
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA57: Create stub for RMM call**

General

ID: TA57
Name: Create stub for RMM call
Tags:

Description: <i>First, let's get the processing sequences down, then we'll go back and get "real" results later. This stub, in addition to accepting the set of authenticator scores upon which it will act, should include some mechanism for altering its output either randomly, or controlled by an "extra" input.</i>	
Attachments:	
Owner: Allen	
Task	
State: Defined	Blocked: false
Ready: false	Blocked Reason:
Estimate: 4.0 Hours	
To Do: 4.0 Hours	
Work Product: US19: Process a Single Batch Test/Use Case	
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA64: Create stub for threshold calculator**

General

ID: TA64
Name: Create stub for threshold calculator
Tags:
Description: <i>The threshold calculator will accept as input all of the environmental risk factors and will return "acceptable threshold" information. While we're still working out the details of what fomulae to put here, we'll begin with a stub that simply returns constants.</i>
Attachments:
Owner: Allen
Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 2.0 Hours
To Do: 2.0 Hours
Work Product: US19: Process a Single Batch Test/Use Case
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA39: Accept scenario input and run through processing**

General

ID: TA39
Name: Accept scenario input and run through processing
Tags:

Description:	<i>The test case input is accepted, any pre-processing involving application of environmental risk ratings is performed, the RMM (stub) is called with the first authenticators. Based on results from the RMM, we compare the results against our acceptance criteria as modulated by the threshold calculator, and either complete processing with a "yes", a "no", or call RMM again with an additional authenticator -- unless we've used them all, in which case we end with a "no". Finally our post-processing determination of final "yes" or "no" is performed.</i>		
Attachments:			
Owner:	Allen		
Task			
State:	Defined	Blocked:	false
Ready:	false	Blocked Reason:	
Estimate:	8.0 Hours		
To Do:	8.0 Hours		
Work Product:	US19: Process a Single Batch Test/Use Case		
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA58: Save test results to output file**

General

ID:	TA58		
Name:	Save test results to output file		
Tags:			
Description:	<i>The results of the test, along with the input parameters that generated the results should be written to an output file for later evaluation. Test results should include some indication of which/how many authenticators were required to reach a determination.</i>		
Attachments:			
Owner:	Allen		
Task			
State:	Defined	Blocked:	false
Ready:	false	Blocked Reason:	
Estimate:	4.0 Hours		
To Do:	4.0 Hours		
Work Product:	US19: Process a Single Batch Test/Use Case		
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**US18: Batch Processing of All Test/Use Cases**

General

ID:	US18		
Name:	Batch Processing of All Test/Use Cases		

Tags:
Description: As the Lead Researcher , I need to be able to initiate processing of the full set of use/test cases so that I can generate test results for later evaluation. <i>This user story "finishes" the single batch case story. It involves iteratively reading test case info from its file/database source, processing.</i>
Attachments:
Owner: Stephen
Hierarchy
Parent: US21: (EPIC) Tune Thresholds
Schedule
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Iteration: Sprint 2
Plan Est: 4.0 PointsTask Est: 4.0 Hours
To Do: 4.0 Hours
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DARPA RA-11-52 Risk Mitigation Metric in Multifactor Authentication Systems**TA38: Loop through use/test case dataset and run each through processing.**

General

ID: TA38
Name: Loop through use/test case dataset and run each through processing.
Tags:
Description: <i>Open the dataset file, read and process each record, storing the results of each test in the designated output location.</i>
Attachments:
Owner: Allen
Task
State: DefinedBlocked: false
Ready: falseBlocked Reason:
Estimate: 4.0 Hours
To Do: 4.0 Hours
Work Product: US18: Batch Processing of All Test/Use Cases
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