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Services

**Texas Department of State
Health Services**

Application Lifecycle Management

Texas Immunization Registry

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Background

IIS Replacement Project

2013

Project Began

2015

ALM Implemented

2017

ImmTrac2 Launch



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Test Case Management

IIS Replacement Project

Test Plan

- Design
- Parameters
- Configuration
- Requirements

Test Lab

- Test Specification
- Run Schedules

Test Runs

- HP Sprinter
- Review Results
- Test Status
- Identify Defects



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Test Case Management

Test Plan



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The screenshot displays a web-based Test Case Management application. On the left is a navigation sidebar with a tree view containing the following items: Dashboard, Management, Requirements, Testing, Test Resources, Test Plan (highlighted in orange), Test Lab, Test Runs, and Defects. The main content area on the right is titled "Test Plan" and includes a toolbar with icons for Tests, Edit, View, Versions, Favorites, and Analysis. Below the toolbar, it states "No Filter Defined". The primary view is a hierarchical tree structure under the heading "Name". The tree starts with a "Subject" folder, which contains an "Unattached" folder and a folder named "Automated Tests (UFT)". The "Automated Tests (UFT)" folder is expanded, revealing a sub-folder "Data Quality Analysis (DQA)", which in turn contains a "DQA (data)" folder and a "V1 UAT Test Cases" folder. The "V1 UAT Test Cases" folder is expanded to show a list of test cases, including "Admin Support", "Alerts", "Application Security", "Consent", "Data Exchange", "Email Notifications" (which has several sub-items like "Generate Password Email", "Generate Username Email", and various "Verify" tests), "Login", "Maintenance", "Manage Clients", "Manage Events", "Manage Immunizations", "Manage Schools", "Manage/Access Account", "Navigation", "Other", and "Reports".

Test Case Management



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Test Lab

The screenshot displays the Test Case Management application interface. On the left is a navigation pane with a tree view containing the following items: Dashboard, Management, Requirements, Testing, Test Resources, Test Plan, Test Lab (highlighted), Test Runs, and Defects. The main area is titled 'Test Sets' and includes a menu bar (Edit, View, Tests, Favorites, Analysis) and a toolbar. Below the menu bar is a tree view showing a hierarchy: Root > Unattached > Releases > Data Quality Analysis (DQA) Test Cycles > Pre-V1 UAT Test Cycles > V1 UAT Test Cycles > V1 UAT Test Cycle 1 (Internal) (highlighted). To the right of the tree view is a table with columns 'Name', 'Type', and 'Status'. The table lists various test cases, all of which are 'MANUAL' and have a status of 'No Run'. The test cases include:

Name	Type	Status
[1]Validate Immunization Input Source (Data Exchange) - Provider File	MANUAL	No Run
[1]Validate Immunization Input Source (Data Exchange) - Payor File	MANUAL	No Run
[1]Create a Client with Client Type = ImmTrac Child (IC)	MANUAL	No Run
[1]Create a Client with Client Type = ImmTrac Adult (IA)	MANUAL	No Run
[1]Create a Client with Client Type = First Responder (FR)	MANUAL	No Run
[1]Create a Client with Client Type = Disaster Consented (DC)	MANUAL	No Run
[1]Create a Client with Client Type = Adult Family Member of First Responder (FM)	MANUAL	No Run
[1]Create a Client with Client Type = Pending Adult (PA)	MANUAL	No Run
[1]Create a Client with Client Type = Pending Verification (PV)	MANUAL	No Run
[1]Validate Immunization Input Source (User Interface)	MANUAL	No Run
[1]Edit Client Consent (Full Access State)	MANUAL	No Run
[1]Verify Imm Records Not Stored (if Consent Not Verified within 90 Days of Submission)	MANUAL	No Run
[1]Add Immunizations for a Client - Add Historical Imms	MANUAL	No Run
[1]Add Immunizations for a Client	MANUAL	No Run
[1]Run School Reports	MANUAL	No Run
[1]Produce Official Client Immunization History	MANUAL	No Run
[1]Create a Client with Client Type = Disaster Unconsented (DU)	MANUAL	No Run
[1]Verify Consent Type Changes to ImmTrac Adult	MANUAL	No Run
[1]Verify Access to Client Records (of Type FR-FM) is Restricted	MANUAL	No Run
[1]Verify Access to Disaster Records	MANUAL	No Run
[1]Verify Consent History Audit Trail	MANUAL	No Run
[1]Withdraw Consent	MANUAL	No Run
[1]Verify Consent History After Purge	MANUAL	No Run
[1]Verify Disaster Event Business Rules	MANUAL	No Run
[1]Verify Both ImmTrac Consent and Disaster Consent (for same Client)	MANUAL	No Run
[1]Edit an Event	MANUAL	No Run
[1]Add an Event	MANUAL	No Run
[1]Verify the System Maintains Demographic, Contact, and Shipping Info for Orgs	MANUAL	No Run
[1]Verify the System Allows Users to Request the Adding Users within their Org	MANUAL	No Run
[1]Verify the System Allows Users to Request the Dropping Users within their Org	MANUAL	No Run
[1]Verify the System Maintains a Hierarchy of Provider Organizations	MANUAL	No Run

Test Case Management



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Test Runs

Dashboard

Management

Requirements

Testing

Test Resources

Test Plan

Test Lab

Test Runs

Defects

Test Runs

Test Set Runs

Build Verification Suite Ru...

Test Runs

Edit

View

Analysis

✖

🗨

🔄

🔍

📧

🔍

▶

Continue Manual Run

🕒

Go to Test Instance

📋

Data Processor Queue

📈

Performance Trending...

No Filter Defined

	Run ID	Run Name	Test: Test Name	Configuration: Name	Status	State	Duration	Exec Date	Exec Time
	48	Run_6-17_11-...	Create a Client w...	Create a Client with Client Type = ImmTrac Child (IC)	❌ Failed		95	6/17/2015	11:52:46 AM
	49	Run_6-17_12-...	Create a Client w...	Create a Client with Client Type = ImmTrac Child (IC)	✅ Passed		67	6/17/2015	12:03:16 PM
	51	Run_6-23_8-2...	Validate Immuniz...	Validate Immunization Input Source (Data Exchange..	⌚ Not Completed		21	6/23/2015	10:26:37 AM
	52	Fast_Run_6-2...	Create a Client w...	Create a Client with Client Type = ImmTrac Child (IC)	🚫 No Run		0	6/23/2015	11:39:45 AM
	53	Fast_Run_6-2...	Validate Immuniz...	Validate Immunization Input Source (Data Exchange..	🚫 No Run		0	6/23/2015	11:40:24 AM

Test Case Management



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Test Runs - Automation

- Regression Testing
- Version Stability
- Stress Testing
- Load Testing

Applications

- QuickTest Professional
- LoadRunner
- Visual API-XP
- HP Unified Functional Testing

Test Case Management

Test Runs – HP Sprinter



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The screenshot shows the HP ALM Test Case Management interface. On the left, a tree view shows the project structure: Root > Releases > V1 UAT Test Cycles > V1 UAT Test Cycle 1 (Internal). The 'Run' button in the toolbar is circled in red, and its dropdown menu is open, showing options: 'Run with Sprinter' (circled in red), 'Run with Manual Runner' (Ctrl+Alt+F9), and 'Continue Manual Run' (Ctrl+Shift+F9). The main table lists test cases with columns for Name, Type, and Status. The first three rows are highlighted in blue.

Name	Type	Status
[1]Validate Immunization Input Source (Data Exchange) - Provider File	MANUAL	No Run
[1]Create a Client with Client Type = ImmTrac Child (IC)	MANUAL	No Run
[1]Run School Reports	MANUAL	No Run

The screenshot shows the HP Sprinter Run Setup dialog and the Test Runs table. The 'Run Setup' dialog has a 'Click to Run Tests' button circled in red. The 'Test Runs' table has a row 'Create a Client with Client T...' circled in red. The 'Create a Client with Client Type = ImmTrac Child (IC)' dialog is also visible, showing the test instance name and test set.

Name	Status
Create a Client with Client T...	

Test Case Management

Test Runs – HP Sprinter



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The screenshot displays the HP Sprinter web application interface. The top navigation bar includes the 'hp Sprinter' logo and tabs for 'Plan' and 'Run'. On the right, there are links for 'HP ALM', 'Settings', and 'Help'. The main content area is divided into two panels. The left panel, titled 'Run Setup', contains a 'Test Runs' section with a table listing test runs. The right panel, titled 'Run Summary', provides details for a specific test run. The test run title is 'Create a Client with Client Type = ImmTrac Child (IC)'. The 'Status' is marked as 'Failed' with a red 'X' icon. The 'Run name' is 'Run_6-24_13-59-23' and the 'Tester' is 'chris.miller'. The 'Start time' is '6/24/2015 4:03:36 PM', the 'End time' is '6/24/2015 4:36:10 PM', and the 'Duration' is '00:32:34'. At the bottom, there are four tabs: 'Actions', 'Run Defects', 'Defect Reminders', and 'Comments', each showing a count of 0. Below these, a 'Steps 12' summary shows 'Passed' (11) and 'Failed' (1) counts, with the 'Failed' count circled in red.

Run Setup

Open Save Favorites

Test Runs

Name	Status
Create a Client with Client T...	✖

Power Mode Off

Create a Client with Client Type = ImmTrac Child (IC)

Print Email

Run Summary

Test instance: Create a Client with Client Type = ImmTrac Child (IC)

Test name: Create a Client with Client Type = ImmTrac Child (IC)

Status: ✖ Failed

Run name: Run_6-24_13-59-23

Tester: chris.miller

Start time: 6/24/2015 4:03:36 PM

End time: 6/24/2015 4:36:10 PM

Duration: 00:32:34

Actions	Run Defects	Defect Reminders	Comments
0	0	0	0

Steps 12

Passed	Failed
11	1



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< Back Forward > Tools ▾ Help ▾

Dashboard Analysis View Dashboard View Management Requirements Testing Test Resources Test Plan Test Lab Test Runs **Defects**

Defects Edit View Favorites Analysis

New Defect... ✕ ↺ 🔍 📄 🚩 📧 📎 🔍 🗨 📌

Filter: Detected By[chris.miller] Detected in Cycle[Pre-V1 UAT Test Cycles\Pre-V1 Test Cycle 1]

New Defect (Alt+N)

	Subject	Assigned To	Status	Severity	Priority
📄 📄 🚩	Consent	chris.miller	New	2 - Major (S2)	3 - Medium (P3)
📄 📄	Manage Clients	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Manage Clients	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Email Notifications	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Manage/Access Account	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Consent	chris.miller	New	2 - Major (S2)	3 - Medium (P3)
📄 📄	Reports	chris.miller	New	4 - Minor (S4)	4 - Low (P4)
📄 📄	Manage Clients	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Email Notifications	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Alerts	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Manage Immunizations	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)
📄 📄	Manage Immunizations	chris.miller	New	3 - Medium (S3)	3 - Medium (P3)

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Browser address bar: https://almdshs1220.saas.hpe.com/qcbin/start_a.jsp

HP Application Lifecycle Management

File Edit View Favorites Tools Help

Application Lifecycle Management

Dashboard Management Requirements Cloud Settings Testing Defects Performance Center

New Defect

Defect Edit X New Defect Summ... Use Default Val Set Default Val

Favorite: (ou De... Attach...

Details

Assigned To: mdavis363 Defect Status: Detected By: mdavis363 Detected in Cycle: Detected in Release: Detected on Date: 7/7/2018 Priority: Severity: Type: Actual Time Spent (Ho... Actual Time Spent (Mi... BA Hrs Est: BA Hrs Remaining: BA Status: Bug:

Description:

B I U A ab [Rich Text Editor Icons]

Submit Close Help

Both Enrollment/Provi... Enhancement mdougherty3... mdougherty3... 2 - Major (S2) 2 - High (P2) Reg/Reg - Remove Last Updated By when state user

Test Case Management

Test Runs – Reports

Analysis View

- Requirement Coverage Graph
- Requirement Summary Graph
- Test Set Summary Graph
- Defect Progress Graph
- Defect Age Graph

Business View Graph

Quick Entity Graphs Generation

Excel Report

Project Report

Dashboard



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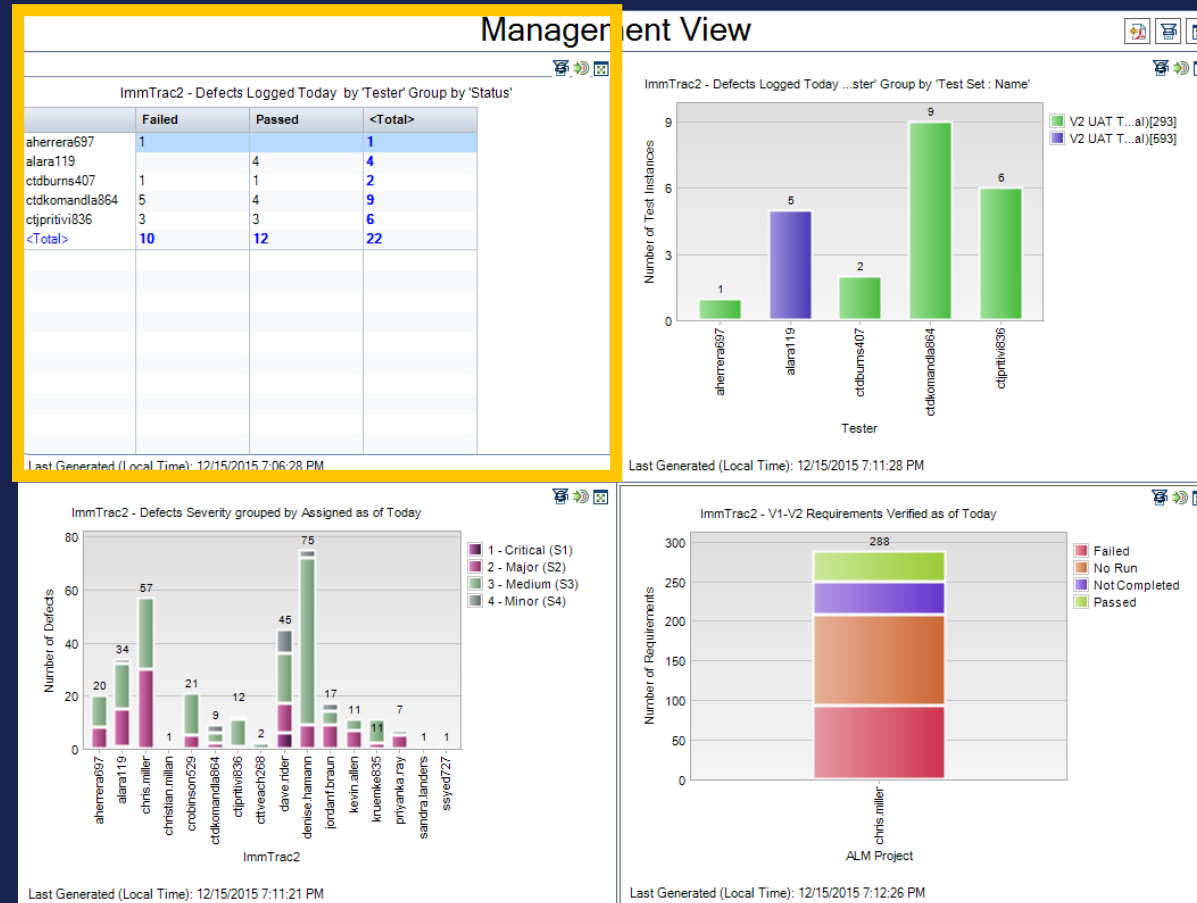
Tracking and Managing

ALM Reports



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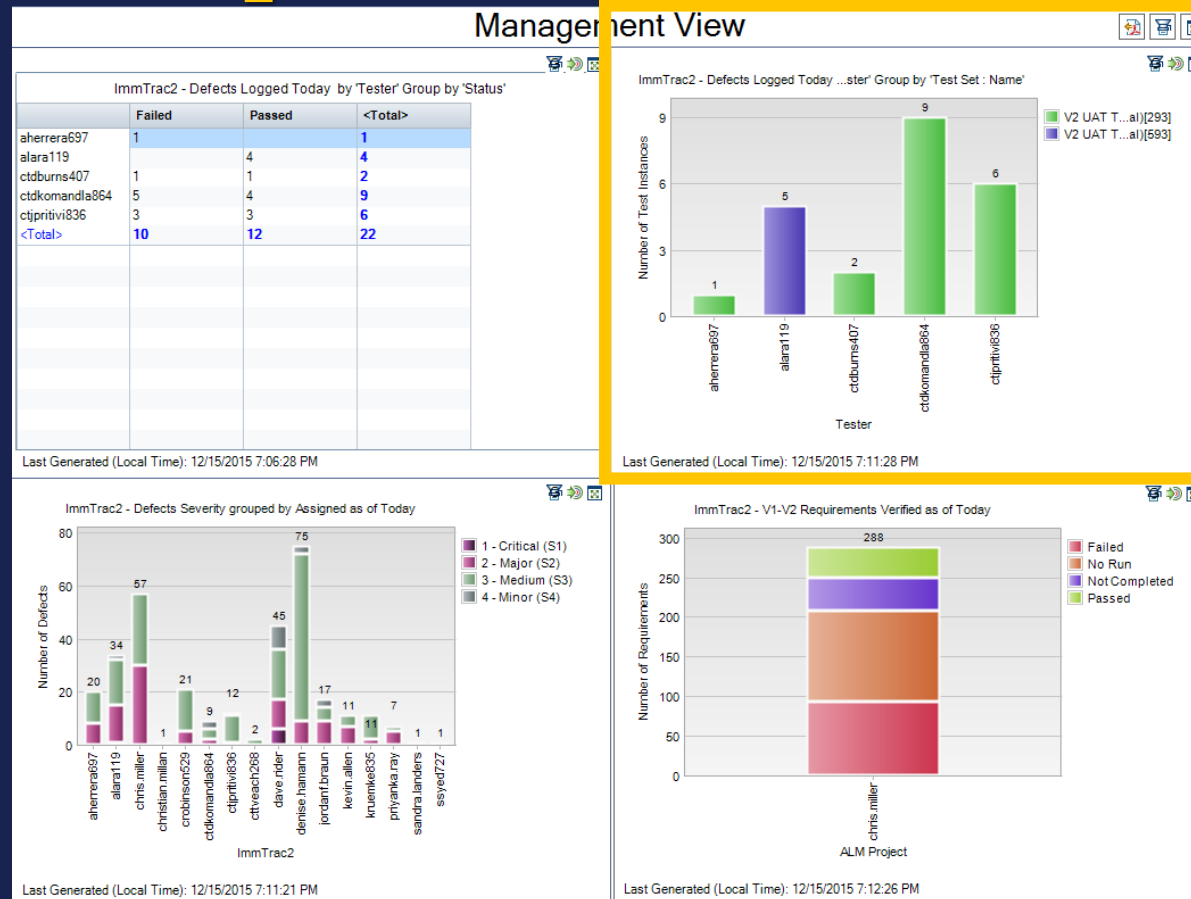
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ALM Reports



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ALM Reports



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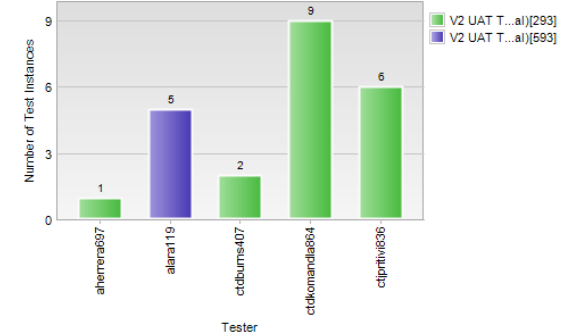
Management View

ImmTrac2 - Defects Logged Today by 'Tester' Group by 'Status'

	Failed	Passed	<Total>
aherrera697	1		1
alara119		4	4
ctdburns407	1	1	2
ctdkomandia864	5	4	9
ctipritivi836	3	3	6
<Total>	10	12	22

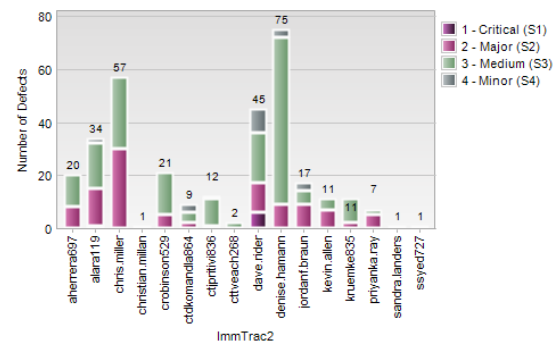
Last Generated (Local Time): 12/15/2015 7:06:28 PM

ImmTrac2 - Defects Logged Today by 'Tester' Group by 'Test Set : Name'



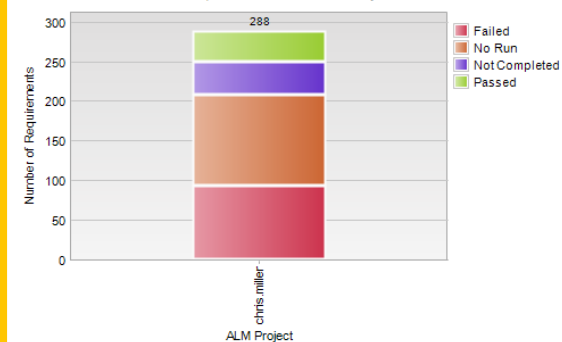
Last Generated (Local Time): 12/15/2015 7:11:28 PM

ImmTrac2 - Defects Severity grouped by Assigned as of Today



Last Generated (Local Time): 12/15/2015 7:11:21 PM

ImmTrac2 - V1-V2 Requirements Verified as of Today



Last Generated (Local Time): 12/15/2015 7:12:26 PM

Tracking and Managing

ALM Reports



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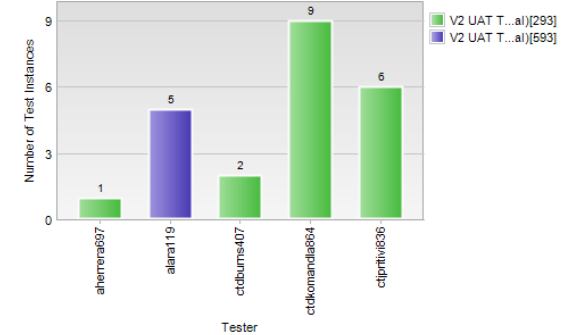
Management View

ImmTrac2 - Defects Logged Today by 'Tester' Group by 'Status'

	Failed	Passed	<Total>
aherrera697	1		1
alara119		4	4
ctdburns407	1	1	2
ctdkomandia864	5	4	9
ctipritivi836	3	3	6
<Total>	10	12	22

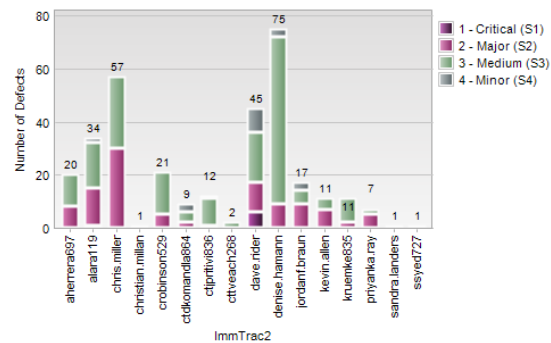
Last Generated (Local Time): 12/15/2015 7:06:28 PM

ImmTrac2 - Defects Logged Today by 'Tester' Group by 'Test Set : Name'



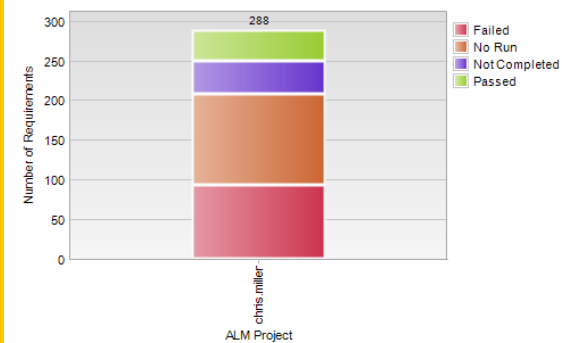
Last Generated (Local Time): 12/15/2015 7:11:28 PM

ImmTrac2 - Defects Severity grouped by Assigned as of Today



Last Generated (Local Time): 12/15/2015 7:11:21 PM

ImmTrac2 - V1-V2 Requirements Verified as of Today



Last Generated (Local Time): 12/15/2015 7:12:26 PM



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Thank you

Texas Immunization Registry

Matthew Davis

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