AZ Department of Corrections
AZ Department of Corrections **DC13007 Adult Inmate Management System (AIMS2)** **Weekly Status Report**
For week ending 08/16/2019
Submitted by: Aaron Bailey

Summary

A project timeline/plan on performance metrics (including counts) recorded on the following areas:

1. Bug fixes & User acceptance
2. Report development & Acceptance
3. Module development updates
4. Change Request development milestones
5. Interface development between systems

Bug fixes & User acceptance

*Last week's Total (Excluding Closed) Bug count: **177 (0 critical, 105 high; 8/9)***
*This week's Total (Excluding Closed) Bug count: **164 (0 critical, 79 high; 8/16)***

Date	# New bugs found	Total # of Repeated bugs identified (Previously in Resolved Stage)	Total # bugs Claimed Resolved by B&D	# Initial UAT Accepted ADC
6/21/19	20	76	64	37
6/28/19	47	49	87	67
7/5/19	22	46	97	25
7/12/19	37	50	87	27
7/19/19	21	47	81	51
7/26/19	23	41	74	43
8/2/19	71	34	97	46
8/9/19	36	26	111	43
8/16/19	61	52	50	72

8/23/19				
8/30/19				
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9/27/19				
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10/25/19				
11/1/19				
11/8/19				
11/15/19				
11/22/19				
11/29/19				

Additional Notes : Use this section to identify Risks, Issues, and Countermeasures

Risk: data migration bugs are a detriment to testing reports and interfere with our ability to fix other bugs, impeding our ability to move modules to Phase 2
Countermeasure: Conduct root cause analysis for difficult bugs, especially data migration bugs

Risk: it is only feasible to conduct data testing for a small sample of the hundreds of thousands of inmate records and other migrated data, leaving the possibility of bugs we fail to identify before pilot
Countermeasure: Test as large a sample as possible, continue data testing each data migration cycle

Risk: the program continues to find new significant bugs, although we close bugs somewhat faster than we find them. If we continue to find significant bugs as we approach pilot, we may not meet existing standards for end-to-end testing
Countermeasure: the 100% of modules in Phase 2 before end-to-end testing has since been understood as not a realistic or sensible standard. After formal evaluation of outstanding bugs, the team decided to move on to continue with the schedule with analysis and understanding of individual bugs and their impact

Risk: if testing fails to uncover bugs, the system may not achieve adoption or required benefits
Countermeasure: continue to test and log bugs as they are identified. Do not let bug metrics prevent

identifying and resolving bugs to improve the final system at the best possible pace

Note: although total bug numbers have not been improving at a steady pace, the number of bugs in the "resolved" state is at a high point. Many of those resolved bugs are waiting for deployment in the next data migration iteration, which is scheduled for the week of 8/13. Of the 105 high system bugs, 64 are resolved and waiting retesting, 24 have been sent back to ADC for reconsideration or further research, and 17 are in a proposed or active development stage. With this context, the program trajectory for pilot and state-wide go-live looks feasible.

Report development & Acceptance

Last week's Total Fully Accepted Report Count: **23 (8/9)**
This week's Total Fully Accepted Report Count: **28 (8/16)**
Note: # of in-scope reports declined by one during the weeks of 7/12, 7/19, and 7/26 and is now 151.
All report numbers below are out of 151 total reports.

- *Please include multiple lines to your updates when needed.*

Date	# DEV Completed by B&D (Delivered to ADC)	# Mig (data fidelity) accepted by ADC (including MIG & UAT accepted)	# MIG & UAT Accepted by ADC	# Reports due by Gantt 5.2 Baseline	Milestone met expected timeline? (Yes or no)
6/21/19	37	15	0	30	No
6/28/19	40	18	7	45	No
7/5/19	40	21	7	45	No
7/12/19	42	28	10	60	No
7/19/19	42	33	10	60	No
7/26/19	58	39	18	75	No
8/2/19	60	41	21	75	No
8/9/19	85	44	23	75	No
8/16/19	89	47	28	75	No
8/23/19				90	
8/30/19				90	
9/6/19				105	
9/13/19				105	
9/20/19				120	
9/27/19				120	
10/4/19				135	
10/11/19				150	
10/18/19				157	
10/25/19				157	

11/1/19				157	
11/8/19				157	
11/15/19				157	
11/22/19				157	
11/29/19				157	

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Risk: The program is late in receiving and being ready to test reports, resulting in uncertainty whether we will be able to receive, test, and accept reports in time for the pilot
Countermeasures: We now have proactive reports from B&D telling us the reports that will soon be available for testing, and we have the organizational structure in place for the right individuals to take immediate action as the reports become available.

Risk: For every report that passes UAT testing, we have two reports that result in bugs for repair at either MIG or UAT, putting the timeline at risk.
Countermeasure: Increase collaboration between ADC test administrators and B&D developers with regular co-location. Set a regular cadence for review of bug backlog and problem-solving between ADC and B&D. Assign a B&D and ADC person to each bug.

Risk: In the earlier months, a significant obstacle was lack of communication of questions and answers about reports between ADC and B&D staff.
Countermeasure: We have dramatically increased the time B&D is located on-site and assigned ADC personnel to each report to support testing and to respond to B&D's questions.

Risk: The pace of report delivery from B&D's development team to ADC for testing is currently behind schedule, leading to the risk of not having the reports in time for testing before pilot and go-live.
Countermeasure: B&D communicates the number of reports in each phase of the pipeline and lists the reports that are nearing readiness for delivery so ADC can provide better support and be ready to test soon after they are delivered.

B&D Pipeline status on 2019-07-05 was:
1: Backend development: 74 reports
2: Frontend development: 65 reports
3: Quality assurance: 49 reports
4: Delivered: 40 reports

B&D Pipeline status on 2019-07-12 was:
1: Backend development: 75 reports
2: Frontend development: 62 reports
3: Quality assurance: 42 reports
4: Delivered: 42 reports

B&D Pipeline status on 2019-07-19 was:
1: Backend development: 108 reports

2: Frontend development: 88 reports
3: Quality assurance: 49 reports
4: Delivered: 42 reports
5: Reports required for E2E testing: 3 accepted, 6 delivered, 19 required

B&D Pipeline status on 2019-07-26 was:
1: Backend development: 96
2: Frontend development: 78
3: Quality assurance: 60
4: Delivered: 56 reports
5: Reports required for E2E testing: 3 accepted,12 delivered, 18 required

B&D Pipeline status on 2019-08-02 was:
1: Backend development: 138
2: Frontend development: 101
3: Quality assurance: 91
4: Delivered: 60 reports
5: Reports required for E2E testing: 4 accepted,16 delivered, 18 required

B&D Pipeline status on 2019-08-09 was:
1: Backend development: 141
2: Frontend development: 110
3: Quality assurance: 98
4: Delivered: 85 reports
5: Reports required for E2E testing: 6 accepted,16 delivered, 18 required

B&D Pipeline status on 2019-08-16 was:
1: Backend development: 141
2: Frontend development: 114
3: Quality assurance: 103
4: Delivered: 89 reports
5: Reports required for E2E testing: 6 accepted,16 delivered, 18 required

Note: B&D Pipeline status filled in on the Monday following the reporting week

Module development (Phase 2 Is Readiness for End-to-End Testing)

This week total Modules Completed (Phase 2) Count: **27 (8/9)**
Last weeks Total Modules Completed (Phase 2) Count: **27 (8/16)**

Date	# of modules moved from complete to incomplete (Phase 2 to Phase 1)	# Modules "completed" by B&D (Phase 1 to Phase 2)	# of Modules in Phase 2	# UAT Accepted by ADC (End to End Phase 2 Testing Complete)
6/21/19	1	0	19	0
6/28/19	2	5	22	0
7/5/19	1	2	23	0
7/12/19	3	4	24	0
7/19/19	1	2	25	0
7/26/19	0	2	27	0
8/2/19	3	2	26	0
8/9/19	2	1	27	0
8/16/19	1	1	27	0
8/23/19				
8/30/19				
9/6/19				
9/13/19				
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11/29/19				

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Risk: with each build and bug resolution, there is the potential for regression or the possibility of new bugs being revealed in testing. There is no way of knowing what future bugs will be discovered and will need resolution.
Countermeasures: Rigorous process for regression testing, and short response times, good tracking mechanisms for script testing. Follow up with B&D to identify root causes of regression.

Risk: regression or instability in the modules harms user perceptions of the AIMS2 system, which may limit motivation and organizational ability to achieve the highest levels of user adoption
Countermeasure: Celebrate program success and accentuate the improvements the system will bring. Make sure that users have sufficient training and support material to aid adoption efforts.

Risk: bugs might be missed in script coverage, which will lead to too much bug discovery during end-to-end Phase 2 testing in September to allow a "go" decision for pilot in October
Countermeasure: Increase informal end-to-end testing early (starting in July) and increase variations in testing to find and address more high-severity bugs before Phase 2 end-to-end testing begins.

35/40 modules have been in Phase 2 but since then have identified one or more high bugs. Those bugs are getting resolved, but until each is completely closed the module remains in Phase 1. As a result, the module readiness has been improving at to a greater degree than is evident from the move in module Phase 2 numbers.

Change Request (CR) Development Milestones

Last week total Change Request Remaining: **2 (CR-75, CR-76)**
This week total Change Request Remaining: **2 (CR-75, CR-76)**

Date	CR # Completed by B&D	Description	UAT Accepted by ADC? (Yes or No)	Ready for Payment? (Yes or No)	Date Justification sent to ASET
6/21/19	4	CR-70-35357-Sentence Element - DC to Probation CR-71-35657-Sentence Element - Weapon Type CR-72-35658-Sentence Element – Injury CR-73-35659-Sentence Element - Probation Revocation	Yes	Yes	7/10
6/28/19	2	CR-69-30126-Transition Minor Discipline CR-74-30497-Community Violence Risk Level	Yes	Yes	7/10
7/5/19	2	CR-76-36066-Prior Adult Felony Convictions CR-77-36574-UC-IR-1.3 Facilitator Drop Down needs to display all AIMS2 users	CR-76: No CR-77: Yes	CR-76: No CR-77: Yes	CR-77: 7/10
7/12/19	1	CR-79-36224-UC Discipline Scoring Level 2	Yes	Yes	7/19
7/19/19	2	CR-67–29663-SED not limiting the TR CR-78-36539-Visitation	Yes	Yes	7/19
7/26/19	0	N/A	N/A	N/A	N/A
8/2/19	0	N/A	N/A	N/A	N/A
8/9/19	0	N/A	N/A	N/A	N/A
8/16/19	0	CR-76 fix should be pushed 8/23	N/A	N/A	N/A
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8/30/19					
9/6/19					
9/13/19					

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Issue: CR-75 Protective Custody Level 3 offenses is not scheduled to be handed off to ADC until October, which is dangerously close to our Perryville pilot
Countermeasure: keep the testing of the modules and other change requests up to date so that we are ready to take quick action to test and accept the change request once it is ready; complete all other work that can be front-loaded so resources are available for when the CR is ready

Issue: CR-76 was tested and has an active bug against it (a previously fixed bug which has been reopened), which must be worked through before ADC can accept it.
Countermeasure: Bug was resubmitted to B&D and will track through the normal Team Foundation Server bug process; a new code push (8/8) delivered most of the needed functionality but CR-76 has not yet fully passed testing and remains unaccepted with an open bug

Interface development between systems (Total System Interfaces: 30)

*Last week total Interface Remaining: **30***
*This week total Interface Remaining: **30***

Date	# Interfaces Completed by B&D (Hand off to ADC)	# Initial UAT Accepted by ADC	#Interfaces Formally Accepted by ADC
6/21/19	30	21	0
6/28/19	30	21	0
7/5/19	30	21	0
7/12/19	30	21	0
7/19/19	30	21	0
7/26/19	30	22	0
8/2/19	30	22	0
8/9/19	30	22	0
8/16/19	30	24	0
8/23/19			
8/30/19			
9/6/19			
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Risks: Although most of the interfaces are nearing completion, PC AIMS is in active development without full clarity on what work will be needed
Countermeasures: New manager is putting extra resources and monitoring to make sure the PC AIMS interface makes sufficient process to not put the schedule at risk
Increased collaboration between ADC PC AIMS team and B&D data team to supply schema and other necessary information