AZ Department of Corrections DC13007 Adult Inmate Management System (AIMS2) Weekly Status Report
For week ending 10/04/2019
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: **180 (0 critical, 80 high; 9/27)*** *This week's Total (Excluding Closed) Bug count: **157 (1 critical, 71 high; 10/04)***

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	116	52	70	56

8/30/19	70	50	94	52
9/6/19	53	40	121	28
9/13/19	73	50	142	58
9/20/19	50	39	123	74
9/27/19	45	40	84	98
10/4/19	60	32	86	73
10/11/19 Pilot Go-No-Go				
Report Out	Please Report on Meeting or Missing Target and list new target, if necessary.			
10/18/19				
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

8/23: This week we began role integration testing--a type of early end-to-end testing. This is the primary reason for the spike in bugs this week. This bug identification is constructive. RIT continues through week of 9/9

9/13: Role integration testing has involved resources who are responsible for retesting "resolved" bugs on ADC's side. The number of those bugs has been increasing. Closing ADC Resolved and Reconsider bugs will be a high priority as we begin end-to-end testing next week (9/16)

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:
High bugs are as follows:
5 active high system bugs, 46 resolved and reconsider system bugs, 9 bugs related to interfaces, 44 bugs related to report development and acceptance

Report development & Acceptance

Last week's Total Fully Accepted Report Count: **46 (9/27)**
This week's Total Fully Accepted Report Count: **59 (10/04)**
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 149 total reports.

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	97	54	30	90	No
8/30/19	107	58	30	90	No
9/6/19	111	61	31	105	No
9/13/19	112	63	35	105	No
9/20/19	114	66	43	120	No
9/27/19	129	68	46	120	No
10/4/19	133	78	59	60	No
10/11/19				73	
10/18/19 All Accepted				86	
Report Out	Please Report on Meeting or Missing Target and list new target, if necessary.				

10/25/19				99	
11/1/19				112	
11/8/19				125	
11/15/19				138	
11/22/19				151	
11/29/19				157	

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

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

B&D Pipeline status on 2019-08-23 was:
1: Backend development: 142
2: Frontend development: 119
3: Quality assurance: 113
4: Delivered: 97 reports
5: Reports required for E2E testing: 6 accepted,16 delivered, 18 required

B&D Pipeline status on 2019-08-30 was:
1: Backend development: 144
2: Frontend development: 126
3: Quality assurance: 121
4: Delivered: 107 reports
5: Reports required for E2E testing: 5 accepted,17 delivered, 18 required

B&D Pipeline status on 2019-09-06 was:
1: Backend development: 144
2: Frontend development: 128
3: Quality assurance: 124

4: Delivered: 112 reports
5: Reports required for E2E testing: 6 accepted,17 delivered, 18 required
Delivery of reports required for E2E testing is late and at risk. Active measures, including increased collaboration time between developers and ADC on site, is scheduled for the week of 9/9.
B&D Pipeline status on 2019-09-13 was:
1: Backend development: 145
2: Frontend development: 131
3: Quality assurance: 128
4: Delivered: 112 reports
5: Reports required for E2E testing: 10 accepted,18 delivered, 18 required
Analysis of the remaining reports required for E2E testing shows that the reports are nearing completion, that testing can begin without them reaching full completion, and that both sides expect the can be completed and fully accepted within two weeks after the start and two weeks before the end of E2E testing. Four remaining reports required for E2E have outstanding bugs against them.

B&D Pipeline status on 2019-09-20 was:
1: Backend development: 145
2: Frontend development: 131
3: Quality assurance: 128
4: Delivered: 119 reports
5: Reports required for E2E testing: 16 accepted,18 delivered, 18 required

B&D Pipeline status on 2019-09-23 (9/27 not yet available) was:
1: Backend development: 145
2: Frontend development: 131
3: Quality assurance: 129
4: Delivered: 129 reports (9/27)
5: Reports required for E2E testing: 17 accepted,18 delivered, 18 required

B&D Pipeline status on 2019-10-04 was:
1: Backend development: 147
2: Frontend development: 139
3: Quality assurance: 137
4: Delivered: 133 reports
5: Reports required for E2E testing: 18 accepted,18 delivered, 18 required

New process in place for more highly dedicated, co-located, vendor/ADC resources this week has changed the trajectory. Now targeting 12 passed off a week until 11/29

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

Last week's total Modules Completed (Phase 2) Count: **27 (9/27)**
This week's Total Modules Completed (Phase 2) Count: **27 (10/4)**

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	2	0	25	0
8/30/19	2	1	26	0
9/6/19	0	1	27	0
9/13/19	2	2	27	0
9/20/19	0	0	27	0
9/27/19	0	0	27	0
10/4/19 Module Debugging To Be Complete	0	0	27	0
Report Out	Please Report on Meeting or Missing Target and list new target, if necessary. See comments below.			
10/11/19				

10/18/19			
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

Note: role integration testing completed this week (9/13) and the program will move to end-to-end testing the week of 9/16

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 and role integration testing 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.

Date: 10/04/19 AIMS2 Bug Report Status Module	High Bugs Total
Classification	7
Sentence Calc	7
Population Mgmt Cell Screening	1
Population Mgmt Count	1
Population Mgmt Movement Holds	1
Population Mgmt Protective Custody	2
Programs	2
Discipline	2
Visitation	2
Community Corrections RMS	3
EIP	1
Grievance	1
Other	2
Total UAT Bugs	32
Data Clean Up and Migration	29
20-Interfaces	10
Reports	49
Total	71

Finding and closing "high" bugs every day. We've reduced the net open high module bugs from 95 on June 14 to 32 on Oct 4. Most of the remaining data clean up and migration will close in the next week as Tender pushes out. Report bugs may continue to climb as we proceed to test remaining reports, but the rate of report bug resolution and report acceptance has significantly increased due to changes we made this week. We are concerned with the bugs that remain, but we are working through them and plan to proceed as scheduled.

Change Request (CR) Development Milestones

Last week total Change Request Remaining: **1 (CR-75)**
This week total Change Request Remaining: **1 (CR-75)**

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
8/23/19	0	CR-76 bug was not resolved, going back to B&D for further fixes.	N/A	N/A	N/A
8/30/19	0	CR-76 bug state now resolved, ADC now retesting	N/A	N/A	N/A
9/6/19	0	CR-76 accepted, in ADOA hands for validation. CR-75 delivered and in	CR-76: Yes CR-75: No	No	CR-76: 9/6

		ADC hands for testing.			
9/13/19	0	N/A	N/A	N/A	N/A
9/20/19	0	N/A	N/A	N/A	N/A
9/27/19	0	N/A	N/A	N/A	N/A
10/4/19 All CR's Ready For Pilot	0	N/A CR-75 not quite passed off, but down to just a few bugs. Cannot pass off until next data migration scheduled 10/10. Hope to have it closed by 10/18.	N/A	N/A	N/A
Report Out	Please Report on Meeting or Missing Target and list new target, if necessary.				
10/11/19					
10/18/19					
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

Issue: CR-75 Protective Custody Level 3 offenses is handed off to ADC early. This is a positive development. It is now in active testing by ADC.

Interface development between systems (Total System Interfaces: 30)

*Last week total Interface Remaining: **24***
*This week total Interface Remaining: **21***

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	30	24	0	
8/30/19	30	24	0	
9/6/19	30	25	0	
9/13/19	30	28	0	
9/20/19	30	28	6	
9/27/19	30	29	6	
10/4/19	30	29	9	
10/11/19				
10/18/19 All Interfaces Ready for Pilot				
Report Out	Please Report on Meeting or Missing Target and list new target, if necessary.			

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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

Note: Interfaces required for end-to-end testing are scripted and generally ready for that step, except Keefe Inmate Trust and Centurion. Those two interfaces will need a little more time but are on trajectory for being completed in time to be tested during the end-to-end testing window that ends 10/18

Risks: Centurion interface has some remaining bugs
Countermeasures: Working closely with Centurion to resolve remaining bugs in the next couple of weeks. Number of open Centurion bugs are down to four.

Risks: Inmate trust not fully ready for E2E testing on schedule
Countermeasure: Vendor VP John Vitale will be on site the week of 9/9 to help us work through remaining issues; that time was very successful and inmate trust is now on a better track