



ATD-2 Integrated Arrival/ Departure/Surface (IADS)

System Specification - Metroplex & TOS Concepts

(Phase 3)

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July 2020

Purpose

This document contains the system specifications and requirements verification matrix for the Metroplex & TOS concepts developed during ATD-2 Phase 3.

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1 Adaptation

Airport (DFW/DAL)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
DAL	The STBO implements terminal and surface modeling and configuration for the DAL airport.	UI: Map, timeline Surface Modeling	5.0 5.1 5.2	ATDI-4736 - update surface map adaptation for DAL CLOSED ATDI-4735 - create asde_layout for DAL airport CLOSED ATDI-4956 - Setup DAL configuration and runway TBFM mappings CLOSED ATDI-4918 - modfy DAL departure_fix_decision_tree to account for SAT as waypoint and destination CLOSED ATDI-5416 - Update Taxi Speeds for DAL Airport CLOSED ATDI-5342 - Add DAL surface layout to map CLOSED	A, D, I, T
DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW	The STBO implements terminal and surface modeling and configuration for all small airports in the D10 TRACON.	UI: Map, timeline Surface Modeling	5.1 5.2	ATDI-5451 - Update asde layout files for AFW, FWS, GPM, FWH CLOSED ATDI-5427 - Setup AFW small airport adaptation CLOSED ATDI-5426 - Update Taxi Speeds for GPM Airport CLOSED ATDI-5425 - Update Taxi Speeds for RBD Airport CLOSED	D, I, T

Airport (DFW/DAL)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-5424 - Update Taxi Speeds for GKY Airport CLOSED ATDI-5423 - Update Taxi Speeds for FWS Airport CLOSED ATDI-5422 - Update Taxi Speeds for AFW Airport CLOSED ATDI-5420 - Update Taxi Speeds for TKI Airport CLOSED ATDI-5419 - Update Taxi Speeds for FTW Airport CLOSED ATDI-5418 - Update Taxi Speeds for DTO Airport CLOSED ATDI-5417 - Update Taxi Speeds for ADS Airport CLOSED ATDI-5357 - Setup DTO small airport adaptation CLOSED ATDI-5358 - Setup FTW small airport adaptation CLOSED ATDI-5359 - Setup FWS small airport adaptation CLOSED ATDI-5360 - Setup GKY small airport adaptation CLOSED	

Airport (DFW/DAL)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-5361 - Setup GPM small airport adaptation CLOSED ATDI-5362 - Setup NFW small airport adaptation CLOSED ATDI-5363 - Setup RBD small airport adaptation CLOSED ATDI-5364 - Setup TKI small airport adaptation CLOSED ATDI-5210 - Setup ADS small airport adaptation CLOSED ATDI-5451 - Update asde layout files for AFW, FWS, GPM, FWH CLOSED	
DFW	The STBO implements terminal and surface modeling and configuration for the DFW airport.	Surface Modeling	5.3 5.3.1	ATDI-5684 - correctly handle internal departure runway assignments with new taxi plans CLOSED ATDI-5645 - add runway utilization scenarios to DFW adaptation CLOSED ATDI-5528 - DFW surface map needs to be updated CLOSED	D, T
DAL	The Terminal Scheduler schedules DAL departures with wake turbulence separation regardless of departure flights' assigned runway.	Terminal Scheduling Management	5.1	ATDI-5355 - Update DAL separations to add dependencies between runways CLOSED	T
DAL	The STBO sets flight state to "TAXI_OUT" within N minutes of receiving an AOBT for flights departing DAL. (N = 0 minutes)	Surface modeling	5.2	ATDI-5474 - DAL flights should go directly to TAXI_OUT on receiving AOBT CLOSED	I

Airport (DFW/DAL)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
DAL	The STBO identifies and automatically updates the current airport configuration for the DAL airport.	Surface modeling	5.4	ATDI-5441 - Enable automatic airport configuration detection for DAL CLOSED	D
DFW	The Terminal Scheduler includes separation based on converging runways for DFW.	Terminal Scheduling Management	5.4.1	ATDI-5850 - Include DFW converging runway separation in terminal what-if airport scheduler CLOSED	I
DFW	The STBO assigns runways to DFW departures based on the flight's originally filed departure fix.	Surface Modeling	5.5	ATDI-5908 - Use default departure fix for runway assignment at DFW CLOSED	D
DFW	The STBO identifies when DFW departure flights are assigned to inner or outer departure fixes. Departing on runways 18L and 18R: Crossing the departure fix: TYGGR, PGLET, LOWGN, BLECO, GRABE, AKUNA ==> Outer All other departure fix ==> Inner Departing on runways 17R and 17C: Crossing the departure fix: TRRCH, ZERLU, AKUNA, GRABE ==> Outer All other departure fix ==> Inner Departing on runways 36R and 36L: Crossing the departure fix: ROOOO, RBBIT, NELYN, JASPA, ARDIA, DARTZ ==> Outer All other departure fix ==> Inner Departing on runways 35L and 35C:	Surface Modeling	5.5	ATDI-5812 - Enable model to derive if flight is an inner or outer fix departure based departure runway and fix CLOSED	I

Airport (DFW/DAL)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	Crossing the departure fix: HANUH, THHOR, ARDIA, DARTZ ==> Outer All other departure fix ==> Inner				
CLT	The STBO identifies parking gates that are unavailable due to heavy aircraft being parked in the A Concourse parking gates at CLT.	Surface Modeling	5.5	ATDI-5860 - CLT update gates blocked by heavy CLOSED	D, I

2 Metroplex/STBO User Interface & Capabilities - TOS Functionalities

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The STBO uses NFDC CDR inputs to generate TOS routes for departure flights.	TOS Management	4.3 5.0 5.10	ATDI-4499 - TOS Service Part 3 (TOS Generator) CLOSED ATDI-4494 - Improve RouteParser Capability CLOSED ATDI-5955 - Update CDR parsing to include all fields from NFDC CDR database CLOSED	D, I, T
	The STBO generates a Trajectory Option Set (TOS) for departure flights under the following rules: 1. TOS route does not include the same departure gate as filed route 2. AND TOS route is an allowed route 3. AND TOS route is an available CDR 4. AND Domestic/OCONUS routes only 5. AND is not in the UNCERTAIN group	TOS Management UI: TOS Table	5.0 5.1 5.2.1 5.3 5.4 5.4.1	ATDI-4499 - TOS Service Part 3 (TOS Generator) CLOSED ATDI-4500 - TOS Service Part 1 (new ATD2 component) CLOSED ATDI-4645 - TOS Service Part 5 (Metroplex) CLOSED ATDI-4662 - TOS Service Part 2 (FMC integration) CLOSED ATDI-4722 - TOS Service Part 4 (additional data elements) CLOSED ATDI-5177 - Allow filtering out un-allowable TOS options CLOSED ATDI-5178 - Allow hiding TOS routes through same departure gate as filed route CLOSED ATDI-4562 - Create a TOS flight data table CLOSED	D, I, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-5308 - Filter out international flights in the TosService CLOSED ATDI-5561 - Filter flights in UNCERTAIN group out of the TOS flights CLOSED ATDI-5713 - Auto-exclude TOS for flights in TMIs CLOSED ATDI-5703 - TosService integration with FMC CDRs CLOSED ATDI-5702 - Setup TMI utility for evaluating defined CDR restrictions CLOSED ATDI-5700 - Disable non-corner CDRs from adaptation CLOSED ATDI-5863 - Change APREQ EDCT and GS flight TOS state from NOT APPLICABLE to ATC EXCLUDED CLOSED	
	Departure flights with the following type of TMIs to the destination have ATC_EXCLUDED as the default coordination TOS state and EXCLUDED as the default eligibility TOS state: 1. APREQ 2. EDCT 3. GS	TOS Management UI: TOS Table	5.4.1	ATDI-5863 - Change APREQ EDCT and GS flight TOS state from NOT APPLICABLE to ATC EXCLUDED CLOSED	D

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The STBO computes route distance for each TOS route for a flight.	TOS Management	5.0	ATDI-4499 - TOS Service Part 3 (TOS Generator) CLOSED	D, T
	The STBO computes Relative Trajectory Cost/RTC for each TOS route for a flight.	TOS Management	5.0 5.2.2	ATDI-4499 - TOS Service Part 3 (TOS Generator) CLOSED ATDI-5574 - Flow based RTC calculations in TOS Service CLOSED	D, I, T
	The STBO computes RTC upper and lower thresholds for each TOS route for a flight.	TOS Management	5.0	ATDI-4499 - TOS Service Part 3 (TOS Generator) CLOSED	D, T
	The STBO computes TOS Route Delay Saving using: 1. UTOT 2. OR UTOT at Pushback 3. OR ETOT	TOS Management	5.2	ATDI-5513 - Add option to compute TOS delay savings using ETOT CLOSED ATDI-5509 - Switch TOS delay mode to UTOT CLOSED	I
	The STBO allows Metroplex Planner and ATC users to activate or deactivate TOS operations.	TOS Management	5.0	ATDI-4715 - Add ability to turn TOS active/inactive in TM Actions CLOSED ATDI-4718 - Create TOS TMI CLOSED	D, T
	The STBO provides the following TOS Coordination states: 1. NOT_SUBMITTED, 2. OPERATOR_EXCLUDED, 3. ATC_EXCLUDED,	TOS Management	5.0 5.4	ATDI-4500 - TOS Service Part 1 (new ATD2 component) CLOSED ATDI-5615 - Change in TOS service to support single-flight and global exclusions CLOSED	D, I, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	4. OPERATOR_SUBMITTED, 5. ATC_ASSIGNED, 6. ATC_REJECTED, 7. ATC_APPROVED, 8. REROUTE_FILED				
	The STBO provides the following TOS Eligibility states: 1. NOT_APPLICABLE, 2. EXCLUDED, 3. POTENTIAL, 4. EXPIRED, 5. CANDIDATE	TOS Management	5.0 5.4	ATDI-4500 - TOS Service Part 1 (new ATD2 component) CLOSED ATDI-5615 - Change in TOS service to support single-flight and global exclusions CLOSED	D, I, T
AAL, SWA	The STBO allows Flight Operator users to submit a TOS route for approval for flights which have not yet departed.	TOS Management UI: TOS Table, Timeline	5.0	ATDI-4716 - TOS per-flight right mouse menu CLOSED ATDI-5201 - Display route options directly from the right-click menu CLOSED ATDI-5257 - Timeline right-click menu should show APROVE with the list of submitted routes CLOSED	D, T
AAL, SWA	The STBO allows Flight Operator users to exclude a flight from TOS route(s).	TOS Management	5.4	ATDI-5714 - Individual Flight Exclusion support in TosService CLOSED	D, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		UI: TOS Table, Timeline		ATDI-5615 - Change in TOS service to support single-flight and global exclusions CLOSED ATDI-5614 - Ability to right-click and exclude a single flight from the TOS Table CLOSED	
AAL, SWA	The STBO allows Flight Operator users to undo the submission of a TOS route.	TOS Management UI: TOS Table, Timeline	5.0	ATDI-4716 - TOS per-flight right mouse menu CLOSED ATDI-5201 - Display route options directly from the right-click menu CLOSED ATDI-5257 - Timeline right-click menu should show APROVE with the list of submitted routes CLOSED	D, T
D10, DFW, DAL	The STBO allows Metroplex Planner and ATC users to approve TOS routes submitted by Flight Operators.	TOS Management UI: TOS Table, Timeline	5.0	ATDI-4716 - TOS per-flight right mouse menu CLOSED ATDI-5201 - Display route options directly from the right-click menu CLOSED ATDI-5257 - Timeline right-click menu should show APROVE with the list of submitted routes CLOSED ATDI-4795 - Integrate TOS results into Model CLOSED ATDI-4784 - TOS Service Handling for Approve Route CLOSED	D, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
D10, DFW, DAL	The STBO allows Metroplex Planner users to undo the approval of TOS routes submitted by Flight Operators.	TOS Management UI: TOS Table, Timeline	5.0	ATDI-4716 - TOS per-flight right mouse menu CLOSED ATDI-5201 - Display route options directly from the right-click menu CLOSED ATDI-5257 - Timeline right-click menu should show APROVE with the list of submitted routes CLOSED	D, T
	The STBO allows one TOS route to be approved per flight.	TOS Management	5.0	ATDI-4645 - TOS Service Part 5 (Metroplex) CLOSED ATDI-5121 - Allow for the user to approve a specific route in the Flight TOS Menu CLOSED ATDI-4795 - Integrate TOS results into Model CLOSED ATDI-4784 - TOS Service Handling for Approve Route CLOSED	D, I, T
	The STBO displays flight routes for each flights, including filed route and TOS routes.	UI: Map	5.0	ATDI-4543 - IDS5 Display flight route data as layer on Metroplex TMI client CLOSED	D
	The STBO displays TOS information for flights: 1. CDR 2. Route 3. RTC 4. RMNT	UI: TOS Table	5.0 5.1 5.6 5.10	ATDI-4550 - Integrate TOS table into STBO client CLOSED ATDI-4562 - Create a TOS flight data table CLOSED ATDI-5262 - Add 'Top ETOT' field to the TOS Departure Table CLOSED	D, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	5. Add nm 6. RWY 7. Eligibility State 8. Coord State 9. UDFT, TDFT, EDFT/TCFT 10. UTOT, TTOT, ETOT/TCOT 11. Surface delay, Terminal delay, Total delay at OFF 12. Terminal delay, Total delay at Fix 13. Surface, Terminal, and Total Delay savings at OFF 14. Terminal and Total delay saving at Fix 15. Top CDR, Top Dep Gate, Top Total Delay Savings OFF, Top Rwy, Top ETOT, Top add nm, Top CDR Rte, Top Departure Fix, Top Departure Fix Delay, Top Departure Fix Time, Top EDFT, Top RTC, Top RMNT, Top TTOT, Top Term Delay OFF, Top Term Delay Savings Dep Fix, Top Term Delay Savings OFF, Top Total Delay OFF, Top UTOT,			ATDI-4940 - Ability to resize the TOS tables inside the TOS Departure Window CLOSED ATDI-5199 - Top route display in the TOS Departure Table CLOSED ATDI-5909 - Invert computation of delay savings on the client CLOSED ATDI-6229 - Modify order of TOS routes in the right-click menu CLOSED	
	The STBO allows for the option to indicate flights with operator-submitted TOS routes.	UI: Timeline	5.0 5.3	ATDI-4559 - Timelines should show TOS status CLOSED ATDI-5083 - Move "T" and delay values to the far right of the datatag CLOSED	D, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-5045 - Display delay and "T" on the right side of the data tag on the right side of the timeline CLOSED	
	The STBO indicates flights with ATC approved TOS routes.	UI: Timeline	5.2 5.3	ATDI-5470 - MP: Keep "T" after approval and change color from white to green CLOSED ATDI-5045 - Display delay and "T" on the right side of the data tag on the right side of the timeline CLOSED	D
	The STBO indicates flight with ATC approved TOS routes which have filed.	UI: Timeline	5.2.1 5.3	ATDI-5567 - Add Green highlighted T when coordination state is Reroute Filed CLOSED ATDI-5045 - Display delay and "T" on the right side of the data tag on the right side of the timeline CLOSED	D, T
	The STBO notifies users when TOS operations are active or inactive.	UI: Toolbar, Notification Panel	5.0 5.10	ATDI-4560 - Add TOS indicator to GUI toolbars CLOSED ATDI-4577 - Add TOS notifications to the notification table CLOSED ATDI-6047 - Notifications Generated by TOS Operation Tab Changes CLOSED	D, T
	The STBO allows for the option to display for departure flights: 1. Terminal delay 2. Surface delay	UI: Timeline	5.0 5.2 5.7	ATDI-4561 - Add delay to TOS timeline CLOSED ATDI-5497 - Add origin as display element for the timeline CLOSED	D

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	3. Total delay 4. Origin 5. Alternate Departure Fix			ATDI-6041 - Timeline datatag: indicate both the 'filed fix' and the 'TOS route fix' after ATC approval until the flight plan is effectively amended CLOSED	
	The STBO allows users to filter for TOS information: 1. TOS Coordination States 2. TOS Eligibility States 3. Departure Gates 4. Top Departure Gates 5. Top additional nm 6. ETOT 7. EDFT 8. Top Term Delay, Total Delay Savings at OFF 9. Top Term Delay Savings at DepFix 10. Destination has APREQ 11. Has EDCT 12. Has Ground Stop 13. Total Delay Saving Minus RTC 14. Airline	UI: TOS Table, Timeline	5.0 5.2 5.8	ATDI-4563 - TOS table filtering CLOSED ATDI-4713 - Update TOS table filters and default fields per latest requirements CLOSED ATDI-5515 - Add EDCT, APREQ, and GS filters to TOS table CLOSED ATDI-5202 - Metroplex Planner: Delay savings compared to RTC as additional filter criteria CLOSED ATDI-5454 - Add 'coord state' and 'eligibility state' as filter criteria for the timeline CLOSED ATDI-6153 - Add airline as criteria in the TOS table filter menu CLOSED	D, I, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The STBO allows users to search for TOS information: 1. callsign 2. destination 3. terminal gate 4. departure fix	UI: TOS Table	5.0	ATDI-4564 - TOS table searching CLOSED	D
	The STBO allows for default sorting of TOS information: 1. Original field route is first 2. Earliest TCOT is first 3. Lowest RTC is first	UI: TOS Table	5.0	ATDI-4717 - TOS table sorting CLOSED	D
	The STBO allows users to sort on displayed TOS information.	UI: TOS Table	5.0	ATDI-4717 - TOS table sorting CLOSED	D
	The STBO allows users to set color coded alerts for TOS information: 1. Coordination States 2. Eligibility States 3. Top RMNT 4. Has Scratch Pad	UI: TOS Table	5.0	ATDI-4565 - TOS table color code eligibility and coordination state CLOSED ATDI-4578 - Add TOS alerting to flight and TOS tables CLOSED	D
	The STBO allows users to enter scratch pad entries for TOS flights.	UI: TOS Table	5.0	ATDI-4567 - Allow scratch pad entries from the flight specific TOS table CLOSED	D, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-4643 - Add scratch pad to Fuser and FMC flights CLOSED	
	The STBO updates departure fix display to that of the ATC-approved TOS route for a departure flight.	UI: Timeline, Map, Table	5.0	ATDI-4575 - Update timeline datablock to show TOS CDR CLOSED	D, T
AAL, SWA	The STBO computes RTC using the following criteria: 1. Default RTC values 2. RTC factor unique to participating airlines	TOS Management	5.0	ATDI-4862 - Airline-specific TOS RTC computations CLOSED ATDI-5131 - Add flag to disable use of airline specific RTC values CLOSED	I, T
AAL, SWA	The STBO restricts Flight Operators access to TOS data to only their carrier and sub-carriers.	UI: TOS Table User Profile & Configuration	5.0	ATDI-4714 - Flight Operators should only be allowed to see their own flights CLOSED ATDI-4976 - Flight Operator limitation to see their own flights only applies to TOS CLOSED	D, I
	The STBO determines the TOP TOS route based on the following criteria: 1. ATC_APPROVED coordination status route 2. SUBMITTED coordination status route with most delay savings over RTC 3. CANDIDATE eligibility status route with most delay savings over RTC	UI: TOS Table	5.1 5.8	ATDI-5199 - Top route display in the TOS Departure Table CLOSED ATDI-6092 - Update TOS Top route criteria CLOSED	T, I

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	4. POTENTIAL eligibility status with most delay savings over RTC (least negative).				
	The STBO allows users to save TOS tables and later open those tables in the configuration they were saved	UI: TOS Table	5.1	ATDI-5166 - Add Save-for-Quick-Create capability for TOS tables CLOSED	D
	The STBO retains the NAS-filed route as the filed route, regardless of approved TOS route status.	TOS Management	5.1	ATDI-5203 - Keep track of eligibility to originally filed route after approval CLOSED	D, T
	The STBO uses User-filed route from SFDPS to match approved CDR from FDIO, ERAM, TBFM, or TFMS.		5.2	ATDI-5500 - TOS Service should use filed route for matching CDR to filed routes CLOSED	T
	The STBO retains the approved TOS route as the "current" route.	TOS Management	5.1	ATDI-5203 - Keep track of eligibility to originally filed route after approval CLOSED	D, T
	The STBO displays the availability of CDR routes.	UI: Map, TOS Route Availability Monitor UI: Map	5.4 5.8	ATDI-5742 - Short key - button at the top of the Map window to toggle the display of CDR 2-letter CLOSED ATDI-5709 - Mark CDR as unavailable if fix is closed CLOSED ATDI-5697 - Enhance Map to show status of CDR availability CLOSED ATDI-6035 - Metroplex Planner: TOS Operation Tab and CDR Settings Window CLOSED	D, I, T

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
				ATDI-6136 - CDR Group constraints should update even when TOS Mode is inactive CLOSED	
	The STBO displays to users the departure fix or the departure procedure for TOS routes, mutually exclusive of each other.	UI: TOS Route Availability Monitor	5.4	ATDI-5758 - Upgrade TOS RAM to respond to fix/procedure name toggle CLOSED	D
	The STBO computes RTC for all TOS routes, including hidden routes.	TOS Management	5.1	ATDI-5203 - Keep track of eligibility to originally filed route after approval CLOSED	D, T
	The STBO allows users to exclude destination airports from TOS.	UI: TOS Route Availability Monitor	5.4	ATDI-5696 - Expand TOS Operation tab to become TOS Reroute Availability Monitor CLOSED	D
	The STBO allows users to restrict CDRs from TOS operations: 1. Restrict entire CDR 2. OR: Exclude specific destinations on a CDR 3. OR: Include specific destinations on a CDR	UI: TOS Route Availability Monitor	5.4	ATDI-5696 - Expand TOS Operation tab to become TOS Reroute Availability Monitor CLOSED	D
	The STBO notifies users of changes in CDR availability.	UI: Notification Window	5.4	ATDI-5762 - Update the Notification Window with events when CDRs are restricted or reopened in the TOS Panel CLOSED	D

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The STBO identifies CDRs that are not available due to Reroute TMIs.	TOS Management	5.5 5.8	ATDI-5779 - Add reroute TMI management to TMI service CLOSED ATDI-5778 - Create FMC reroute TMI class CLOSED ATDI-5777 - Publish reroute messages from TFM Flow to TMI Service CLOSED ATDI-6055 - TMI TOS listener for reroute advisories CLOSED ATDI-5985 - Parse TFM reroute advisories for adjacent centers CLOSED ATDI-6143 - CDR Group constraint logic should include protected segment check CLOSED	T, D
	The STBO identifies the departure ARTCC and arrival ARTCC for CDRs.	TOS Management	5.5	ATDI-5889 - Update CDRs to include arrival centers CLOSED	T
	The STBO displays a list of all CDRs, and all relevant information about those CDRs.	TOS Management	5.7	ATDI-5698 - Create a list of CDR that would be accessible from the TOS Reroute Availability Monitor CLOSED	D
	The STBO displays the following metrics in the TOS tables for TOS flights: 1. Top route aggregated delay savings 2. Top route average delay savings 3. Top route number of flights affected by delay savings	TOS Management	5.8	ATDI-6129 - Real-time metrics for TOS Tables CLOSED ATDI-6073 - WhatIf scheduler calculates aggregated delay change CLOSED	D, I

Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	4. Top route probability delay savings > RTC			ATDI-6126 - Adding Aggregated Runway Delays to ToS Service CLOSED ATDI-6090 - Add real time delay metrics to TOS backend data CLOSED	
	The STBO identifies CDRs that are not available due to terminal restrictions	TOS Management	5.8	ATDI-6009 - Update TOS Operation tab and Map when terminal restrictions result in CDR to be ATC excluded CLOSED ATDI-6128 - CDRs should only be restricted if pair of fixes is closed CLOSED	D, I
	The STBO displays alerts on appropriate clients whenever TOS routes are: 1. Submitted by a Flight Operator 2. Approved by an ATC	TOS Management	5.9 5.10	ATDI-6138 - MP: Submit/Approve TOS Route Alert (Visual) CLOSED ATDI-6165 - MP: Submit/Approve TOS Route Alert (Audio) RESOLVED	D

3 Metroplex/STBO User Interface & Capabilities

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO generates a default user profile for each operator client.	Surface Modeling	5.0	ATDI-5290 - Import default scf files for DAL and DFW CLOSED ATDI-4841 - Update MP SCF files with latest capabilities CLOSED ATDI-5288 - Import user preference files to release 5.0.0 CLOSED	D
		The STBO implements permission modes for the following users: 1. Metroplex Planners, ATC users 2. Flight Operators 3. Observers	UI: Toolbar, Timeline, TOS Table, Flight Table, Map User Profile & Configuration	5.0	ATDI-4679 - Client: Set up Flight Operator and Metroplex Planner roles CLOSED ATDI-5285 - Setup observer mode scripts for the DFW/DAL only clients CLOSED ATDI-5272 - Setup standard STBO run scripts CLOSED	D
DFW, DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW		The STBO implements surface and terminal modeling and configuration for the metroplex and its airports.	Surface Modeling	5.0 5.3	ATDI-4579 - Update client to support multiple airports CLOSED ATDI-4611 - Add new flight category for internal departures CLOSED ATDI-4902 - rungui.MetroplexPlanner for DAL CLOSED ATDI-5628 - Update all DFW installs to be configured for small airports CLOSED	D, I, T

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW		The STBO implements small airport modeling.	Surface Modeling	5.0 5.3	ATDI-4226 - Create DAL small airport model CLOSED ATDI-5103 - Actual times updater in small airport model CLOSED ATDI-5104 - Small airport undelayed time hovering CLOSED ATDI-5153 - Small airport model actual value improvements CLOSED ATDI-5628 - Update all DFW installs to be configured for small airports CLOSED	D, I
		The STBO processes departures and arrivals for multiple airports within the metroplex.	UI: Timeline, Map, Tables, Graph Aircraft Management, Flight Management	5.0	ATDI-4776 - Implement LineOfFlight and Aircraft in FmcEnvelopeApi CLOSED ATDI-3905 - Single Fuser for DFW and DAL CLOSED ATDI-4184 - Metroplex commander configuration for DFW and DAL CLOSED ATDI-4611 - Add new flight category for internal departures CLOSED ATDI-4645 - TOS Service Part 5 (Metroplex) CLOSED	D, I, T
		The STBO displays small airports within the metroplex.	UI: Map, TM Action Panel	5.2	ATDI-4852 - Update small airports displayed in the Client CLOSED	D
		The STBO displays departure fixes in specified colors.	UI: Map	5.0	ATDI-4538 - IDS5 Metroplex TMI client Departure Fix Display CLOSED	D

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
					ATDI-4544 - IDS5 Metroplex TMI client should react to TMI changes CLOSED	
		The STBO allows for option to display: 1. Departure fix closures 2. OR departure fix closures with alternative fix	UI: Map, Timeline	5.0 5.2	ATDI-4541 - IDS5 Metroplex TMI client fix closures CLOSED ATDI-4544 - IDS5 Metroplex TMI client should react to TMI changes CLOSED ATDI-5486 - Options to display fix information on Timeline CLOSED	D
		The STBO displays Miles in Trail/MIT restrictions on the departure fixes.	UI: Map	5.0	ATDI-4542 - IDS5 Metroplex TMI client Miles in Trail restrictions CLOSED ATDI-4544 - IDS5 Metroplex TMI client should react to TMI changes CLOSED	
		The STBO displays departure demand for: 1. departure fixes 2. departure gates	UI: Graph	5.0	ATDI-4548 - Create departure demand graph CLOSED ATDI-4961 - Add tool tips to demand and delay graphs CLOSED ATDI-5214 - Demand graphs: rename 'Scheduled' to 'Terminal Constrained' CLOSED	D, I
		The STBO displays departure delay for: 1. departure fixes 2. departure gates	UI: Graph	5.0	ATDI-4549 - Create departure delay graph on IDS5 CLOSED ATDI-4961 - Add tool tips to demand and delay graphs CLOSED	D

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO allows for the option to display: 1. Terminal delay 2. Surface delay 3. Total delay	UI: Timeline	5.0	ATDI-4561 - Add delay to TOS timeline CLOSED	D
		The STBO allows for the option to configure display of arrival flights.	UI: Map	5.0	ATDI-4680 - Client: Add map toolbar option to hide arrival icons CLOSED	D
	D10, DFW, DAL	The STBO allows Metroplex Planner and ATC users to apply TMIs to specific airport(s).	UI: TM Actions Panel TMI Management	5.0	ATDI-4824 - Front-end capability to apply TMIs to a specific airport within metroplex CLOSED ATDI-4839 - Tracon TMIs need to use matching ID across all airports CLOSED ATDI-5095 - Problems with multi-airport TMIs CLOSED ATDI-5132 - Improve metroplex TMI airport constraint modifications CLOSED ATDI-5133 - Consolidate Metroplex TMI's in TM Actions panel CLOSED ATDI-5134 - Single notification for Metroplex TMI's CLOSED ATDI-5207 - DAL fix TMI's don't show on the map CLOSED	D, I, T
		The STBO displays Estimated Take Off Time (ETOT): 1. If Terminal Metering is on ETOT = TCOT	UI: TOS Table	5.0	ATDI-5114 - Update TOS Table Fields - Part 1 - Add new backend items CLOSED	D, I

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		2. If Terminal Metering is off ETOT = TTOT			ATDI-5115 - Update TOS Table Fields - Part 2 - Change Display of TOS Items CLOSED	
		The STBO displays Estimated Departure Fix Time (EDFT).	UI: TOS Table	5.0	ATDI-5114 - Update TOS Table Fields - Part 1 - Add new backend items CLOSED ATDI-5115 - Update TOS Table Fields - Part 2 - Change Display of TOS Items CLOSED	D, I
		The STBO displays aircraft with CPDLC-DCL capability.	UI: TOS Table	5.2	ATDI-5489 - Add CPDLC-DCL data element to TOS Departure Table CLOSED ATDI-5325 - Incorporate SFDPS data into the Fuser CLOSED ATDI-4990 - Add CPDLC-DCL data element to the TOS Data CLOSED	D, I, T
		The STBO allows for the option to display flights ordered by: 1. Terminal Constrained Takeoff Time (TCOT) 2. Surface Constrained Takeoff Time (TTOT/Latest)	UI: Timeline	5.0	ATDI-4805 - Display Terminal Controlled Off Time (TCOT) on STBO timelines CLOSED ATDI-5196 - Change data label names in the timeline settings CLOSED	D, I, T
		The STBO allows for the option to display departure fixes name in: 1. Abbreviated form 2. Full form	UI: Map	5.0 5.2.2	ATDI-5289 - IDS5 Fix display: change 3-char fix abbrev to 5-char fix name CLOSED ATDI-5575 - Replace ARD with RDA for abbreviation of ARDIA route/fix CLOSED	D, I

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO allows for the option to display departure fixes as the corresponding departure procedure name	UI: Map, Timeline	5.2	ATDI-4700 - For DFW display departure fixes as departure procedures CLOSED	D
DFW		The STBO allows for referencing departure gate closures as Out The Gate (OTG) restrictions.	TMI Management UI: TM Action Panel	5.0	ATDI-5241 - Add OTG flag to ScheduledResourceStatus CLOSED ATDI-5242 - Add OTG to TM Action Panel CLOSED ATDI-5237 - Define lookup mappings for inner/outer fixes CLOSED	A, D, T
DFW		The STBO allows for flights affected by OTG Departure Gate Restrictions to update to the alternate departure fix specified in OTG.	TMI Management	5.0	ATDI-5238 - Define OTG fix mappings CLOSED	D
DFW		The STBO displays OTG restrictions.	UI: Map, Timeline, Flight Table	5.0	ATDI-5244 - Show OTG next to closed fix on STBO Client CLOSED ATDI-5243 - Display OTG on notification panel, timelines, and flight table CLOSED	D
DFW		The STBO notifies users of a new OTG restriction.	UI: Notification Panel	5.0	ATDI-5283 - Display OTG on Notification Panel CLOSED	D
	D10	The STBO allows TRACON users to change runway utilization for any airport in the TRACON.	UI: TM Actions Panel TMI Management	5.1	ATDI-5399 - Problems with TRACON setting runway utilization CLOSED	D

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
DFW, DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW		The STBO allows users to select an airport layout.	UI: Map	5.1 5.3	ATDI-5342 - Add DAL surface layout to map CLOSED ATDI-5628 - Update all DFW installs to be configured for small airports CLOSED	D, I
DFW, DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW		The STBO allows users to display flights filtered by the flight's airport.	UI: Map	5.1 5.3	ATDI-5356 - Map - modification of View menu to distinguish arr/dep per airport CLOSED ATDI-5628 - Update all DFW installs to be configured for small airports CLOSED	D, I
DFW, DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW		The STBO allows users to display range rings by airports within the metroplex.	UI: Map	5.2 5.3	ATDI-5354 - Add airport tabs in range rings set-up window CLOSED ATDI-5628 - Update all DFW installs to be configured for small airports CLOSED	D, I
		The STBO displays loading status while starting its clients.	UI: STBO Client	5.1	ATDI-5408 - Add a 'Loading...' window to the Client CLOSED	I
		The STBO allows Metroplex Planner users with the same capabilities as the ATC users.	STBO User settings & preferences	5.1	ATDI-5275 - Add remaining right-click menu features in STBO to MP CLOSED ATDI-5276 - Add remaining features from STBO that are not included in the MP CLOSED ATDI-5341 - TaxiList for DAL users CLOSED	D, I

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO displays arrival and departure flights for each airport within the metroplex with separate and configurable color schemes	UI: Map, Timeline	5.1 5.2.1 5.4	ATDI-5374 - Update color scheme for arrivals and departures in datatag setting CLOSED ATDI-5572 - Update arrival runway color for DFW 17C/35C CLOSED ATDI-5767 - Client: Add colors for satellite arrivals when using the Arrival Runway color scheme CLOSED ATDI-5675 - Change color for DFW/DAL departures to D10 airport on the timeline CLOSED ATDI-5721 - Match fix/route color to own gate color on the timeline while using the departure gate color scheme CLOSED	D, I
		The STBO allows users to preview airport specific settings.	UI: Map	5.2	ATDI-5407 - Add a 'Preview' button to the Airport Settings dialog CLOSED	D
		The STBO displays the destination of arrival flights.	UI: Map, Timeline	5.4.1	ATDI-5828 - Add destinations to the list of data in the Timeline and Map setting for arrivals CLOSED	D
		The STBO displays flights that require reporting in OPSNET. The STBO allows users to designate OPSNET flights.	UI: Flights Table, Timeline	5.5	ATDI-5842 - Add OPSNET Timeline Option for DFW and DAL Towers CLOSED	D
		The STBO allows users to adjust the direction that datatag information is displayed on the timeline.	UI: Timeline	5.5	ATDI-5827 - Option to display left side of timeline from left to right or right to left CLOSED	D

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO records and displays long-term TMIs.	UI: TM Actions Panel UI: Map TMI Management	5.5 5.6 5.7	ATDI-5838 - Track long term closure flag in TMI updating CLOSED ATDI-5706 - Let users set end time for persisting taxiway closures CLOSED ATDI-5925 - Long-term Runway Closures in the TM Actions Panel CLOSED	D, I, T
		The STBO by default only applies MIT restrictions to JET flights.	UI: TM Actions Panel TMI Management	5.5	ATDI-5918 - Only allow MIT restriction to apply to JETs CLOSED	D
DFW		The STBO identifies the respective runway queue that a departure flight is in.	UI: Map UI: Timeline	5.6	ATDI-5870 - Identify active AMA taxing flight in their respective runway queues CLOSED	D, I
		The STBO allows users to hide datablocks for aircraft in the ramp.	UI: Map	5.7	ATDI-5966 - STBO Client - Option to hide data block when aircraft in ramp CLOSED	D
DFW		The STBO displays DCC Advisories (ATCSCC Advisories).	UI: TM Actions Panel TMI Management	5.8	ATDI-6068 - Metroplex Planner: DCC Route Advisory Tab CLOSED ATDI-6169 - Add TM route advisory tab to the FO clients CLOSED	T, D, I
CLT		The STBO allows users to enable and disable APREQ Pre-Scheduling.	UI: Settings	5.8	ATDI-6061 - Add APREQ preschedule tab to STBO Settings Window CLOSED	D, T

Airport	Operators (D10, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The STBO allows users to display a flight's full route on the map.	UI: Map	5.10	ATDI-6231 - expand alt+r display of route to include full route CLOSED	D

4 RTC User Interface & Capabilities

Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
The RTC displays a message when a scheduler compression event occurs.	UI: Map	5.5	ATDI-5795 - RTC/RMTC: Compression Message CLOSED ATDI-5797 - Send compression event from tactical scheduler to RTC CLOSED	D, I
The RTC allows users to freeze the TOBT and TMAT of metered flights. This feature is not available for : 1. Non-metered flights 2. APREQ flights where APREQ has not yet been negotiated.	UI: Map	5.6 3.1.4	ATDI-5753 - RMTC Flight Menu: "Freeze Advisory" Option CLOSED ATDI-4017 - Allow user to manually freeze TOBT and TMAT from RTC CLOSED	D

5 Terminal Scheduler Capabilities

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
DAL, DTO, FTW, FWS, GKY, GPM, NFW, RBD, TKI, ADS, AFW	The Terminal Scheduler implements small airport terminal scheduling.	Terminal Scheduling Management	5.0 5.2 5.7	ATDI-4226 - Create DAL small airport model CLOSED ATDI-5209 - Update small airport model to work for multiple airports CLOSED ATDI-6059 - Increase small airport model calling tactical scheduler planning window to 480 minutes CLOSED	D, I
	The Terminal Scheduler integrates the Tactical Scheduler into the terminal scheduling system.	Terminal Scheduling Management	5.0 5.2 5.7 5.10	ATDI-4756 - Implement terminal scheduler core algorithm CLOSED ATDI-4802 - Adapter to bridge between Terminal Scheduler and Tactical Scheduler CLOSED ATDI-5279 - Option for terminal scheduler to use predicted STA instead of final STA from Tactical Scheduler CLOSED ATDI-6031 - Option to allow Primary Scheduler to use Embedded Tactical Scheduler for DAL CLOSED ATDI-5921 - Apply slot algorithm concept to the departure fix scheduler CLOSED	I
	The Terminal Scheduler schedules arrival flights.	Terminal Scheduling Management	5.3	ATDI-5514 - Add arrivals to the terminal scheduler CLOSED	I

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The Terminal Scheduler computes for arrival flights: 1. Terminal Controlled On Time - Estimated 2. Terminal Controlled On Time - Actual	Terminal Scheduling Management	5.3	ATDI-5514 - Add arrivals to the terminal scheduler CLOSED	I
	The Terminal Scheduler passes a flight's TCOT to the tactical scheduler if: 1. the flight has a MIT restriction at the departure fix 2. OR there is a default separation at the departure fix	Terminal Modeling	5.0 5.1	ATDI-5164 - Terminal scheduler changes to prevent gaps in schedule CLOSED ATDI-5294 - Pass terminal delay to airport scheduler after specified iteration CLOSED ATDI-5348 - Update fix scheduler sort times and check on terminal delay each iteration CLOSED	D, I
	The Terminal Scheduler schedules the following times for departure flights: 1. Takeoff times (Terminal Constrained Off Times) 2. Departure Fix times (Terminal Constrained Departure Fix Times) The Terminal Scheduler ensures all the following constraints are satisfied: 1. MIT 2. APREQ/EDCT 3. Departure Fix Closures 4. Runway Closures 5. Airport Configurations	Terminal Scheduling Management	5.0 5.6	ATDI-4693 - Create Terminal Scheduler project CLOSED ATDI-4756 - Implement terminal scheduler core algorithm CLOSED ATDI-5926 - Basic Slot Algorithm for Tracon Scheduler CLOSED	I, D

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The Terminal Scheduler computes the following times for departure flights' original filed routes and each flights' TOS routes. 1. Terminal Constrained Off Time (TCOT) 2. Target Takeoff Time (TTOT) 3. Estimated Departure Fix Time (EDFT)	Terminal Scheduling Management	5.0 5.8	ATDI-4759 - Terminal Scheduler - TOS and WhatIf Integration CLOSED ATDI-5070 - Update TTOT for alternate TOS routes CLOSED ATDI-6170 - Whatif flights getting TCOTs earlier than UTOTs CLOSED ATDI-5853 - Use tactical scheduler as what-if airport scheduler CLOSED	I
	The Terminal Scheduler computes the transit time from the runway to the departure fix for filed routes and TOS routes.	Terminal Modeling	5.0	ATDI-4694 - Create transit time service to be used by the Terminal Scheduler CLOSED ATDI-4917 - Integrate transit time service into terminal scheduler CLOSED ATDI-4922 - Add transit time source to flight and database CLOSED ATDI-5073 - Update DepartureAirborneModel to use default speed of 0 until flight departs CLOSED ATDI-5142 - Update departure airborne model to use new speed values CLOSED	I, T
	The Terminal Scheduler schedules flights subject to an APREQ or EDCT at the APREQ or EDCT time.	Terminal Modeling	4.7 5.0 5.2	ATDI-4756 - Implement terminal scheduler core algorithm CLOSED ATDI-5508 - For flights with EDCT, TOS ETOTs are 5 minutes less than filed route ETOTs CLOSED	I

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The Terminal Scheduler applies MIT separation constraint for departure flights with UTOT within the MIT end time.	Terminal Modeling, TMI Management	5.0	ATDI-5100 - Limit MIT separation constraint to end time of MIT restriction CLOSED	D
	The Terminal Scheduler allows for the option to set default aircraft speed in order to compute MIT separation times.	Terminal Modeling, TMI Management	5.0	ATDI-5127 - Update MIT speed conversion logic CLOSED	D
	The Terminal Scheduler allows for the option to set default separation for a specific departure fix.	Terminal Modeling, T MI Management	5.0	ATDI-5101 - Add ability to have default separation restriction over each fix CLOSED ATDI-5180 - Apply default MIT separation to EAST gate only CLOSED	D, I
	The Terminal Scheduler uses undelayed take off time/UTOT at pushback as default for delay computations.	Terminal Scheduling Management	5.1	ATDI-5450 - Configure TosService to use UTOT at Pushback as Delay Basis CLOSED	I
	The Terminal Scheduler allows for the option to use UTOT at pushback or current UTOT for delay computations.	Terminal Scheduling Management	5.1	ATDI-5410 - Add optional use of Undelayed at Pushback to TOS delay computation CLOSED	T
	The Terminal Scheduler filters piston and turboprop flights from its scheduling process.	Terminal Scheduling Management	5.1	ATDI-5387 - Add piston and turboprop filtering to the terminal scheduler CLOSED	D
	The Terminal Scheduler prioritizes departure flights over GA uncertain flights with condition:	Terminal Scheduling Management	5.9.1 5.10	ATDI-6210 - Departure fix scheduler de-prioritize GA uncertain flights CLOSED	D

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	UTOT for departure flight - UTOT for GA Uncertain > N; (N = 30 minutes)			ATDI-6217 - Departure fix scheduler limits GA uncertain flights disadvantage time to 30 minutes. CLOSED	
	The Terminal Scheduler applies default MIT restrictions (N = 5 MIT for EAST gate only) when departure fixes are combined.	Terminal Scheduling Management	5.0 5.1	ATDI-5191 - Automatically apply default MIT if fixes are combined CLOSED ATDI-5180 - Apply default MIT separation to EAST gate only CLOSED	D, I
	The Terminal Scheduler schedules internal departures.	Terminal Scheduling Management	5.3	ATDI-5548 - Update Terminal Scheduler to allow internal departures CLOSED	I
	The Terminal Scheduler allows controlled flights to be eligible for a TTOT slot that is N minutes earlier than it's TCOT (N = 2 minutes).	Terminal Scheduling Management	4.8 5.4	ATDI-5692 - Allow controlled flight to compete for TTOT slot earlier than it's controlled time CLOSED	D

6 Tactical Scheduler Capabilities

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	The Tactical Scheduler ingests TCOT from the Departure Fix Scheduler for each iteration.	Tactical Scheduling Management	5.0	ATDI-5029 - Make tactical scheduler adhere to TCOT CLOSED ATDI-4825 - TerminalSlotNetwork - Update flight object for TCOT functionality CLOSED ATDI-4802 - Adapter to bridge between Terminal Scheduler and Tactical Scheduler CLOSED	I, T
	The Tactical Scheduler integrates TCOT as a part of the Order of Consideration grouping within the RBS scheduling algorithm.	Tactical Scheduling Management	5.0 5.1	ATDI-4798 - TerminalSlotNetwork - Process terminal scheduler controlled off time in SurfaceSlotNetwork CLOSED ATDI-5291 - Add TCOT slot eligibility buffer CLOSED	D
DFW	The Tactical Scheduler provides divergent route scheduling when N flights compete for one departure time slot. (N=4)	Tactical Scheduling Management	5.8	ATDI-6130 - Divergent route algorithm execute only with enough demand CLOSED	I
	The Tactical Scheduler passes surface constrained takeoff times to the terminal scheduler.	Tactical Scheduling Management	5.2	ATDI-5279 - Option for terminal scheduler to use predicted STA instead of final STA from Tactical Scheduler CLOSED	D, I
	The Tactical Scheduler applies compression to frozen flights when the following conditions are met: 1. flight is frozen as gate departure but is not departure ready 2. flight is not APREQ or EDCT 3. the difference between flight's TTOT and UTOT is less than N minutes threshold	Tactical Scheduling Management	5.4	ATDI-5717 - Schedule compression detection feature CLOSED ATDI-5783 - Compression schedule additions CLOSED	D, I

Airport	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
	4. flight's TOBT is later than its UOBT				
	The Tactical Scheduler schedules DAL flights.	Tactical Scheduling Management	5.6 5.7	ATDI-5851 - Use tactical scheduler as stand-alone scheduler for KDAL CLOSED ATDI-6010 - Add DAL adaptation to tactical scheduler CLOSED ATDI-6030 - DAL tactical scheduler should use StrategicDmpNetwork CLOSED ATDI-6031 - Option to allow Primary Scheduler to use Embedded Tactical Scheduler for DAL CLOSED	D, I
	The Tactical Scheduler computes the following times for departure flights' original filed routes and each flights' TOS routes: 1. Target Takeoff Time (TTOT) 2. Estimated Departure Fix Time (EDFT)	Tactical Scheduling Management	5.8	ATDI-5853 - Use tactical scheduler as what-if airport scheduler CLOSED ATDI-5990 - Separate scheduling windows for Primary Scheduler and WhatIf Scheduler CLOSED	A

7 Flight Data Ingestion and Processing

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The ATD-2 system processes flight data for multiple airports within a metroplex.	Flight Data Processing Management	5.0	ATDI-3905 - Single Fuser for DFW and DAL CLOSED ATDI-4184 - Metroplex commander configuration for DFW and DAL CLOSED ATDI-4611 - Add new flight category for internal departures CLOSED ATDI-4645 - TOS Service Part 5 (Metroplex) CLOSED	D, I
	AAL, SWA	The ATD-2 system ingests EOBT data from flight operators that are ATD-2 participants within the metroplex.	Flight Data Processing Management	5.0 5.2	ATDI-4910 - SWA data parsing of EOBT's CLOSED ATDI-5438 - Integrate SWA EOBT to datahubs CLOSED ATDI-5437 - Connect to SWA EOBT test data CLOSED	I
		The ATD-2 system ingests TFM Flow data using the following rules to process TMI information: 1. Parse as a fix closure if a restriction has: a. OTG, b. ON INNERS, c. ON OUTERS,	Flight Data Processing Management	5.0 5.1 5.2 5.7 5.8	ATDI-5240 - Define TMI Service TFM parsers CLOSED ATDI-5245 - Update and remove OTG restrictions as a single TMI CLOSED ATDI-5273 - Add OTG column to TMI tables CLOSED ATDI-5274 - Add OTG flag to ClientFlight CLOSED	D, I, T

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		d. ON (FIX) 2. Parse as an MIT if If the qualifier is NONE and there is a milesInTrail value 3. Apply MIT to the rerouted fixes specified in the fix closures if the milesInTrail value is set in conjunction with another qualifier 4. Parse as a fix closure with CDR for "swap" TFM Flow messages 5. Reroute parsing for "WEATHER" reason 6. Reroute parsing for adjacent centers			ATDI-5292 - Parse TFM OTG closure as gate instead of list of fixes CLOSED ATDI-5236 - Refactor TmiService to return a list of restrictions when transforming TFM data CLOSED ATDI-5239 - Create TfmMitTransformFactory in TmiService CLOSED ATDI-5367 - Add swaps to TFM Flow parsing CLOSED ATDI-5512 - Fix re-addition of cancellations from TFM Flow CLOSED ATDI-6015 - Allow TFM reroutes with WEATHER reason to be processed CLOSED ATDI-5985 - Parse TFM reroute advisories for adjacent centers CLOSED	
		The ATD-2 system is capable of ignoring TFM Flow refresh messages	Flight Data Processing Management	5.1 5.2	ATDI-5432 - Add flag to disable processing TFM Flow refresh messages CLOSED ATDI-5511 - Disable TFM TMI refresh messages CLOSED	T

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The ATD-2 system is capable of handling TMI removal messages from TFM flow.	Flight Data Processing Management	5.3	ATDI-5545 - Handle TFM Flow Restrictions with '39' action type CLOSED	T
		The ATD-2 system activates, sets, and mediates constraints for CDR groups.	Flight Data Processing Management	5.8 5.9	ATDI-6053 - Structural changes for CDR Groups CLOSED ATDI-6057 - Refactor CDR group restricted logic CLOSED ATDI-6058 - Update CDR group mediation between USER and TFM entries CLOSED ATDI-6216 - Allow multiple CDRs to be set as preferred CLOSED	T, D
		The ATD-2 system ingests data from from the MITRE APP data feed.	Flight Data Processing Management	5.0	ATDI-5080 - Enable Mitre App for Metroplex and DAL configurations CLOSED	D
		The ATD-2 system stores data produced by the schedulers, available to be queried.	Flight Data Storage Management	4.3 5.0 5.2	ATDI-4754 - Terminal Scheduler database writer CLOSED ATDI-4814 - Add isTcot to database CLOSED ATDI-4813 - Add isApreq and isEdct to database CLOSED ATDI-4922 - Add transit time source to flight and database CLOSED	D, I

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
					ATDI-5457 - Add terminal times to Fuser flight CLOSED	
		The ATD-2 system stores data produced by the TOS, available to be queried.	Flight Data Storage Management	5.0 5.2	ATDI-4501 - TOS Database CLOSED ATDI-4790 - Add TOS computed values to DB CLOSED ATDI-5485 - Add TOS last update time to terminal_scheduler_whatif table CLOSED	I, T
DFW, DAL		The ATD-2 system ingests gate assignments from FlightStats feed.	Flight Data Processing Management	5.2	ATDI-5480 - Combine DFW/DAL flight stats topics into a single stream CLOSED	I
		The ATD-2 system ingests CPDLC-DCL equipage data from the SFDPS feed.	Flight Data Processing Management	5.2	ATDI-4990 - Add CPDLC-DCL data element to the TOS Data CLOSED ATDI-5325 - Incorporate SFDPS data into the Fuser CLOSED ATDI-5499 - Add SFDPS route fields to Fuser and FMC CLOSED	D, I, T
		The ATD-2 system ingests data for D10 small airports.	Flight Data Processing Management	5.2	ATDI-5091 - Add all D10 airports to the Fuser CLOSED	I

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The ATD-2 system stores flight compression data.	Flight Data Processing Management	5.4	ATDI-5796 - Add compression flight info to database CLOSED	I
		The ATD-2 system identifies flights that require reporting in the OPSNET system.	Flight Data Processing Management	5.5	ATDI-5880 - Add OPSNET flag to backend flight data CLOSED	T
		The ATD-2 system records exclusion reasons for unavailable CDRs.	Flight Data Processing Management	5.5	ATDI-5903 - Add exclusion reasons to FMC CDR references CLOSED	D, I
		The ATD-2 system is capable of sending an Update MIT Constraint Request to TBFM WSRT.	Flight Data Processing Management	5.6 5.8	ATDI-5884 - TBFM Web Service Handle MIT Constraint Message CLOSED ATDI-5886 - IDAC Proxy Sends Update MIT Constraint Request to TBFM WSRT CLOSED ATDI-5888 - TMWS Soap Server Handles MIT Constraints Message CLOSED ATDI-5961 - TMWS Updates MIT Constraint When Receiving MitConstraintUpdateRequest Message CLOSED	T, I, D
		The ATD-2 system records Arrival Stand Availability for TTP Flight Data.	Flight Data Processing Management	5.6	ATDI-5956 - Produce ArrivalStandAvailability for TTP Flight Data CLOSED	D, I

Airport	Client (D10 ATC, DFW, DAL, AAL, SWA)	Functional Description	Functional Components	Release	Trace (JIRA)	Verification Methods
		The ATD-2 TTP publishes FMC departure fix closures.	Flight Data Processing Management	5.7	ATDI-2882 - Add FMC departure FIX closures to TTP Schema CLOSED	I
		The ATD-2 system predicts and displays airport banks.	Flight Data Processing Management	5.8	ATDI-6089 - Add Bank Analysis web client to IadsAssembler CLOSED	D
		The ATD-2 system parses and records TBFM Data. 1. Flight Plan Status (FPS) 2. Aircraft Status (ACS) 3. Departure Runway 4. Manually Scheduled 5. Coordination Time (CTM) 6. Departure Proposed Time	Flight Data Processing Management	5.9 5.11	ATDI-6157 - Add TBFM super stream class to Fuser processing CLOSED ATDI-6273 - Add TBFM CTM field to Fuser tbfm_extension CLOSED ATDI-6303 - Add TBFM FPS and ACS to the TBFM extension CLOSED	I