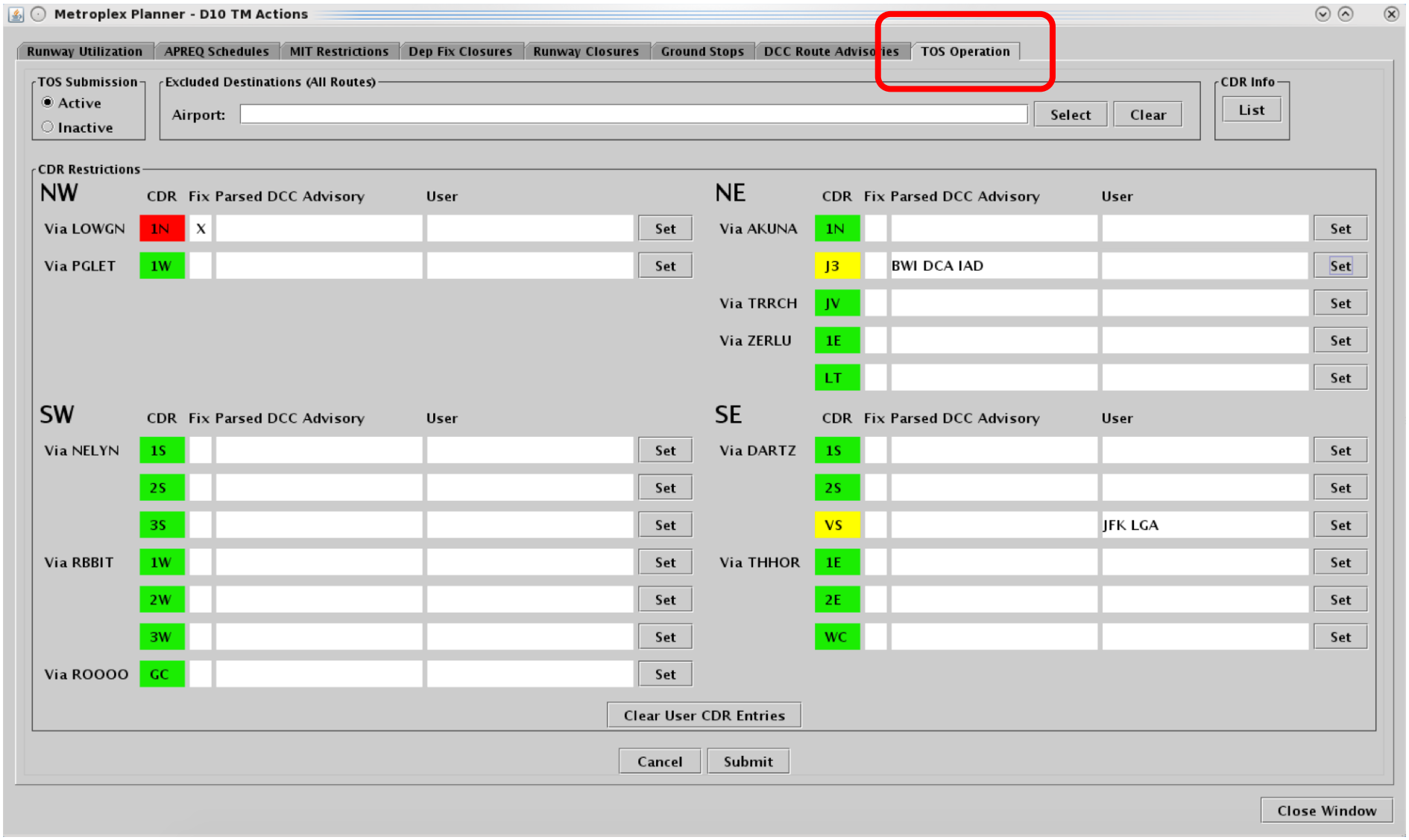
ATD-2
Integrated Arrival/Departure/Surface

NASA

User Guide:
TOS Operation Tab
and
DCC Route Advisories Tab

TOS Operation Tab

TOS Operation Tab

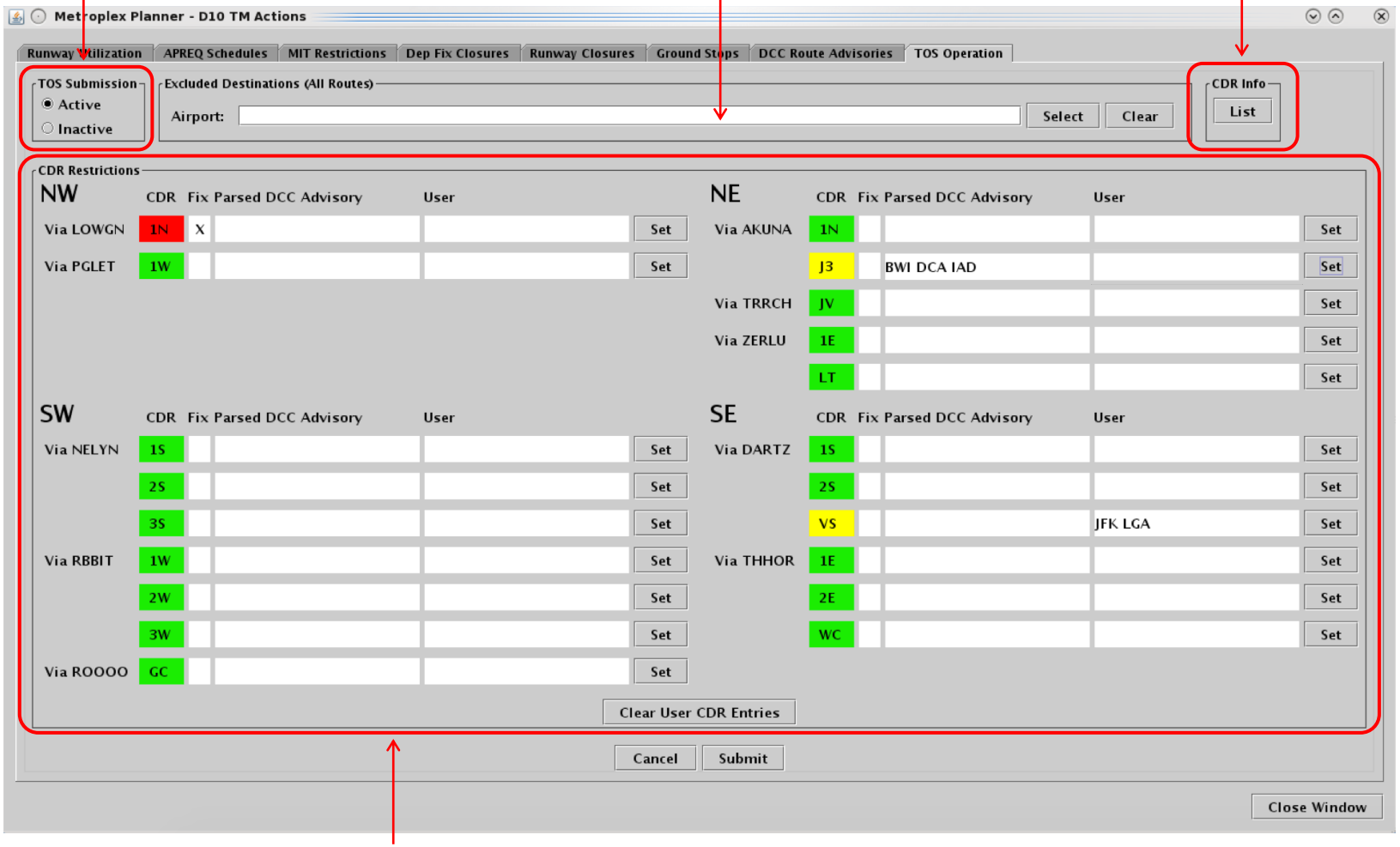


Description of the TOS Operation Tab

TOS Submissions: Turn ON or OFF the ability for Flight Operator to submit and for ATC to approve a TOS route

Excluded Destinations (All Routes): Destinations in this field are excluded from TOS submissions and approval

CDR List: Display all CDR/destination combinations



CDR Restrictions at terminal corners based on terminal restrictions, DCC advisories, and User entries

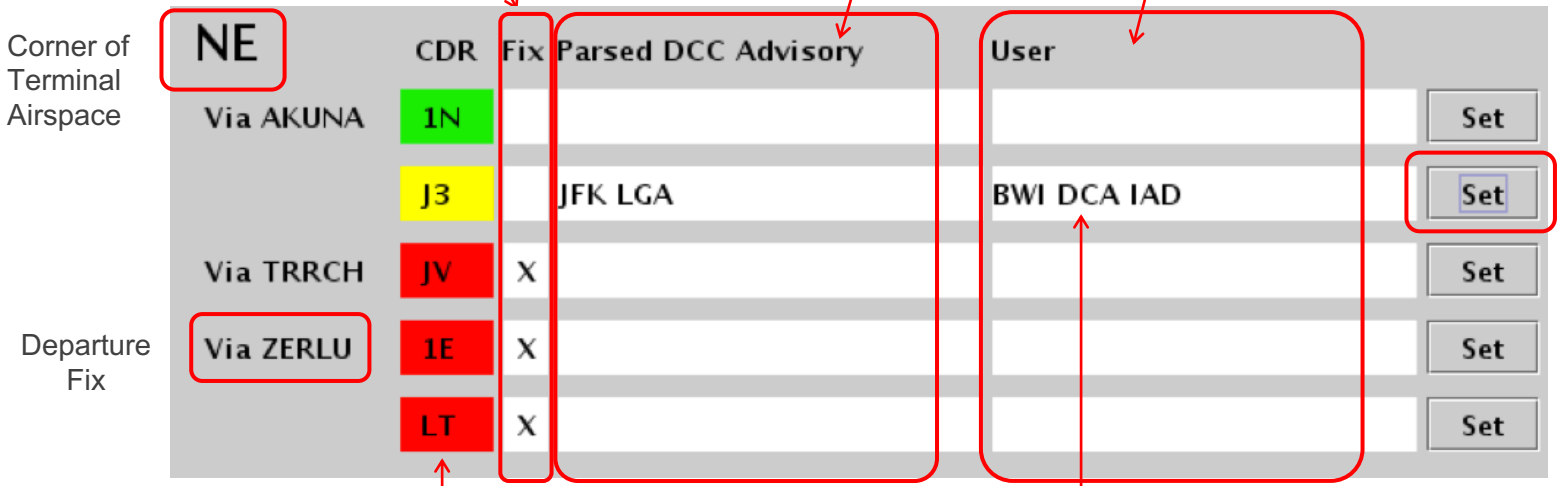
CDR Menu Close-up

Fix: Indicates if the terminal route/fix is open or closed
Open [ ] Closed [X]

CDRs restricted by current **DCC Advisories**

User-entered CDR restrictions

Destinations listed in these two columns are restricted from using that CDR.



Set: CDR Settings Window for User-entered restrictions

Last 2-digits of CDR code

In this example, TOS will not present the "**J3**" **AKUNA CDR** as a re-route option for **BWI**, **DCA**, or **IAD** flights while this restriction is in place.

CDR is Open: When **NO** destinations are restricted, the CDR code is shown in green.

VS

CDR is Partially Restricted: When **SOME** destinations are restricted, the CDR code is shown in yellow.

VS

CDR is Closed: When **ALL** destinations are restricted, the CDR code is red.

VS

When all destinations are restricted from using a CDR for TOS rerouting, the CDR is **closed** and is highlighted in red. "ALL" is displayed.

ALL

When exceptions are made to a closure, "ALL (Except <dest>)" is displayed.

ALL (Except SHV)

CDR Settings Window: Interface Details

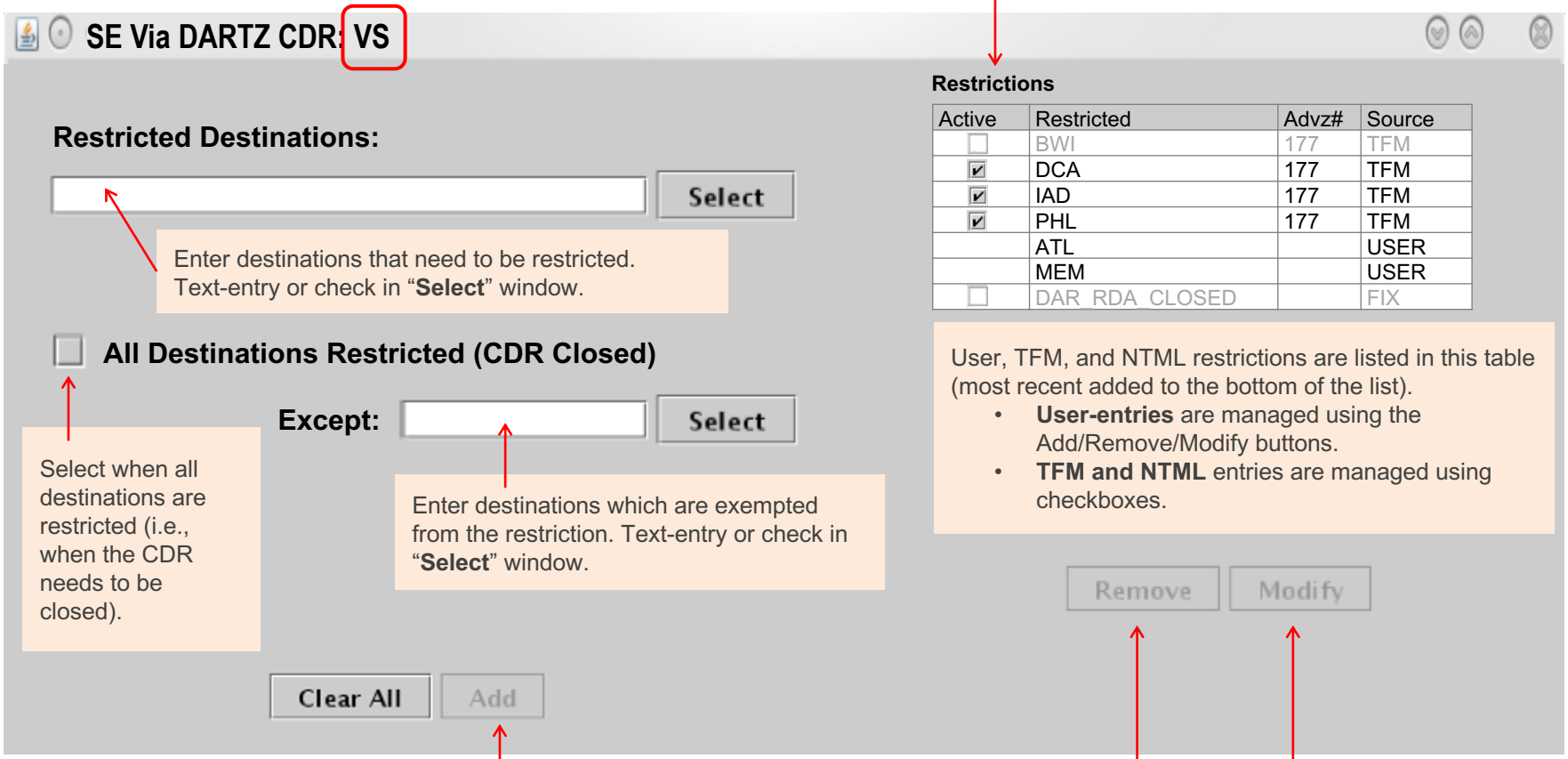
The **CDR Settings Window** provides:

- An interface for inputting User-entries
- An interface for managing DCC Advisories and NTML Closures
- Situational Awareness for current restrictions

Each CDR Settings window is specific to a single CDR (e.g., DARTZ "VS")

Restrictions Table: DCC Advisories are displayed in the Restrictions table beginning at their Start Time and are removed at their End Time.

This selection is the mechanism with which the User manages DCC Advisories and NTML Closures.



Assumptions by the Automation

ZFW STMCs have full control over whether a CDR is open, partially restricted, or closed.

Use the CDR Settings Window to manage CDR restrictions:

- Destinations from parsed DCC Advisories (by Activating or De-activating them),
- Destinations from User-entries (by Adding/Updating or Removing them)
- “ALL” Destinations / CDR Closures (by Activating or De-activating them)

By default the automation will assume the following logic:

- CDR Closures (due to Fix Closures) take precedence over:
  - Parsed DCC Advisories,
  - User-entered partial restrictions (e.g., MEM, ATL), and
  - User-entered CDR Closures (“ALL” Destinations Restricted)

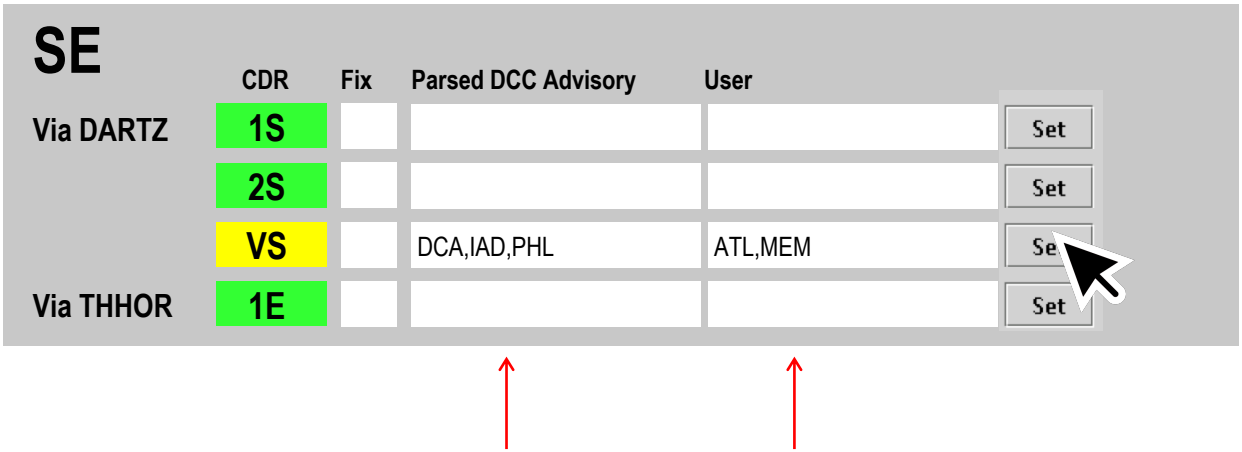
- User-entered CDR Closures (i.e., “ALL” Destinations Restricted) take precedence over:
  - Parsed DCC Advisories, and
  - User-entered partial restrictions (e.g., MEM, ATL)

- In the event of a duplicate destination restriction (e.g., MEM):
  - A User-entry *already in place* takes precedence over a *new* Parsed DCC Advisory

Examples of Use Cases

Example – Add a Restriction

1



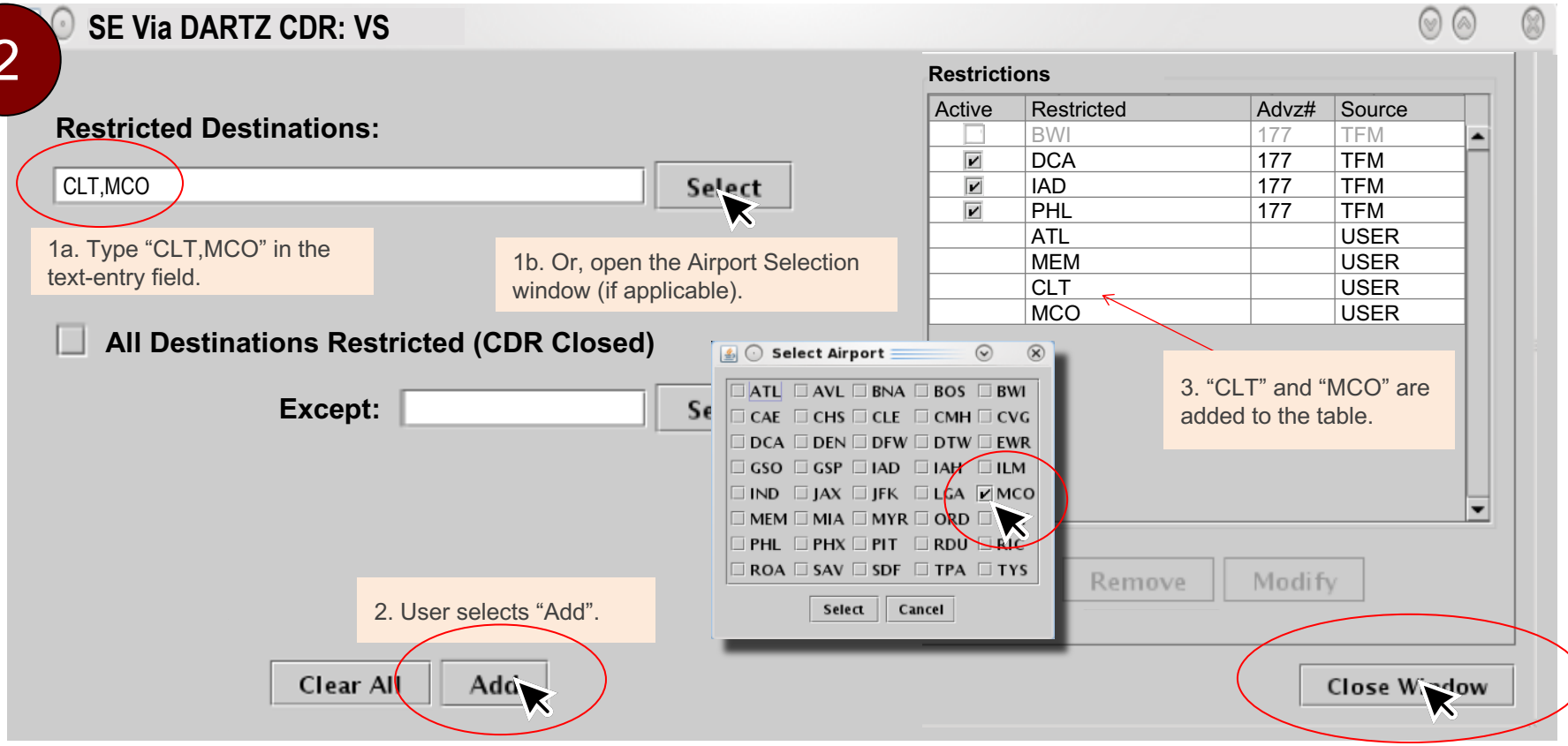
Partial-restrictions are currently in place.

You then decide to restrict two more destinations: “CLT” and “MCO”.

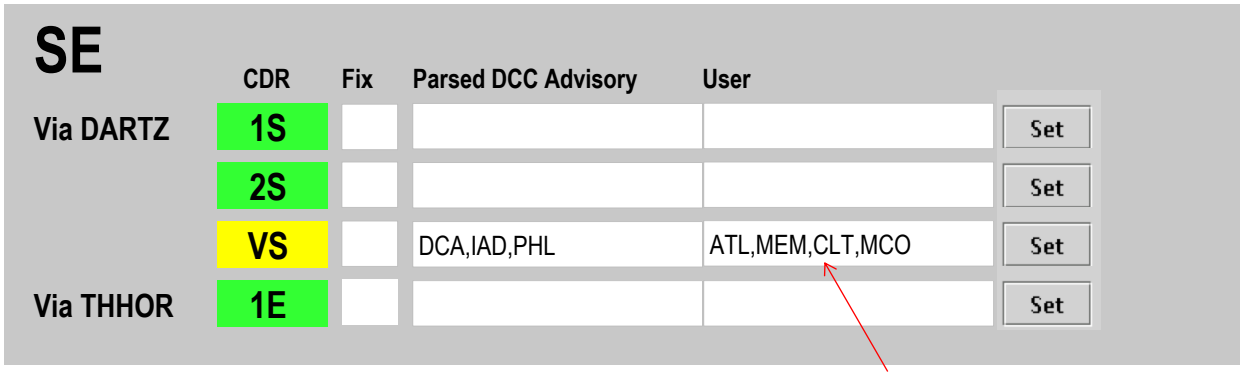
Select the “Set” button to access the CDR Settings Window.

Example – Add a Restriction

2



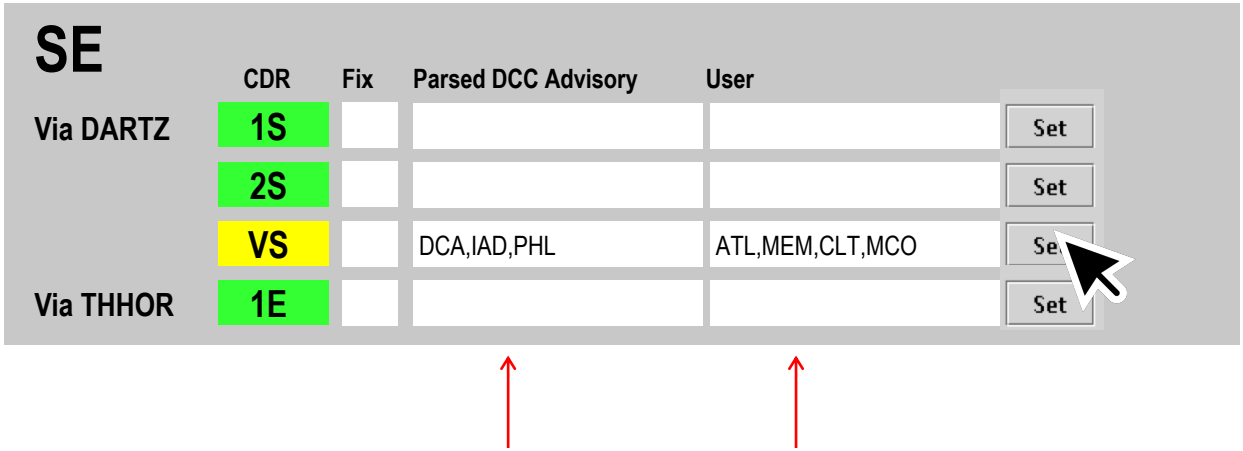
3



4. On the TOS Operation Tab, "CLT" and "MCO" are shown in the User column.

Example – Remove a Restriction

1



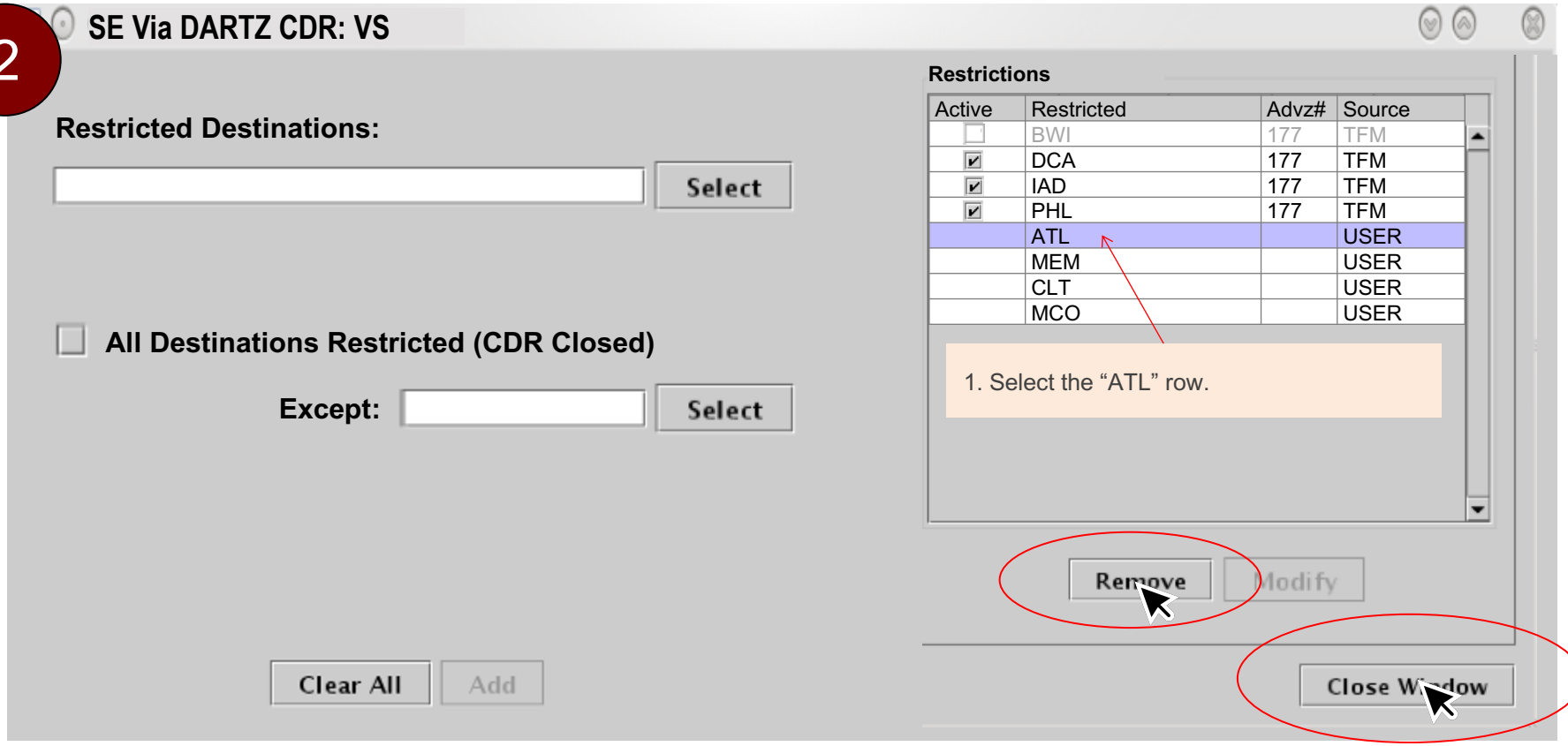
Partial-restrictions are currently in place.

You then decide that ATL no longer needs to be restricted.

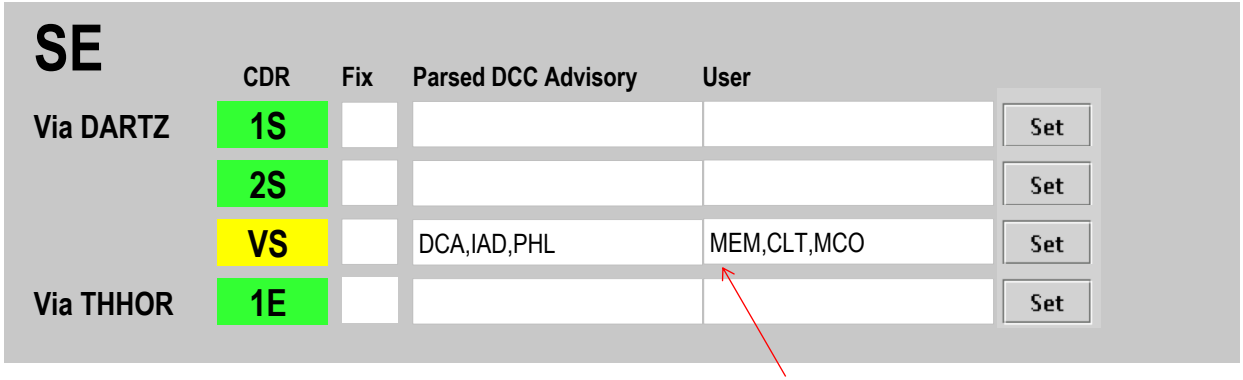
Select the “Set” button to access the CDR Settings Window.

Example – Remove a Restriction

2



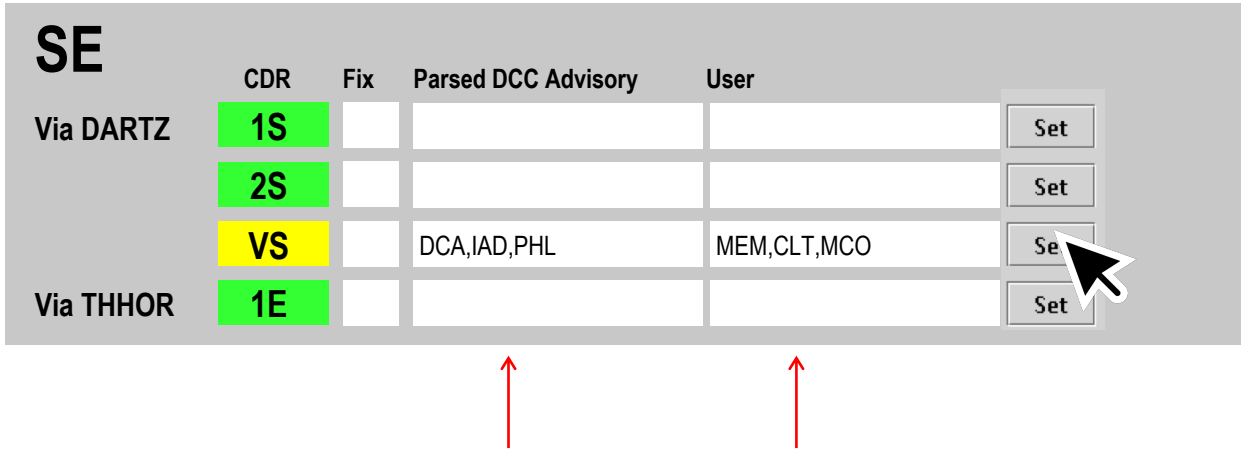
3



2. "ATL" is no longer displayed on the TOS Operation Tab.

Example – Close a CDR

1



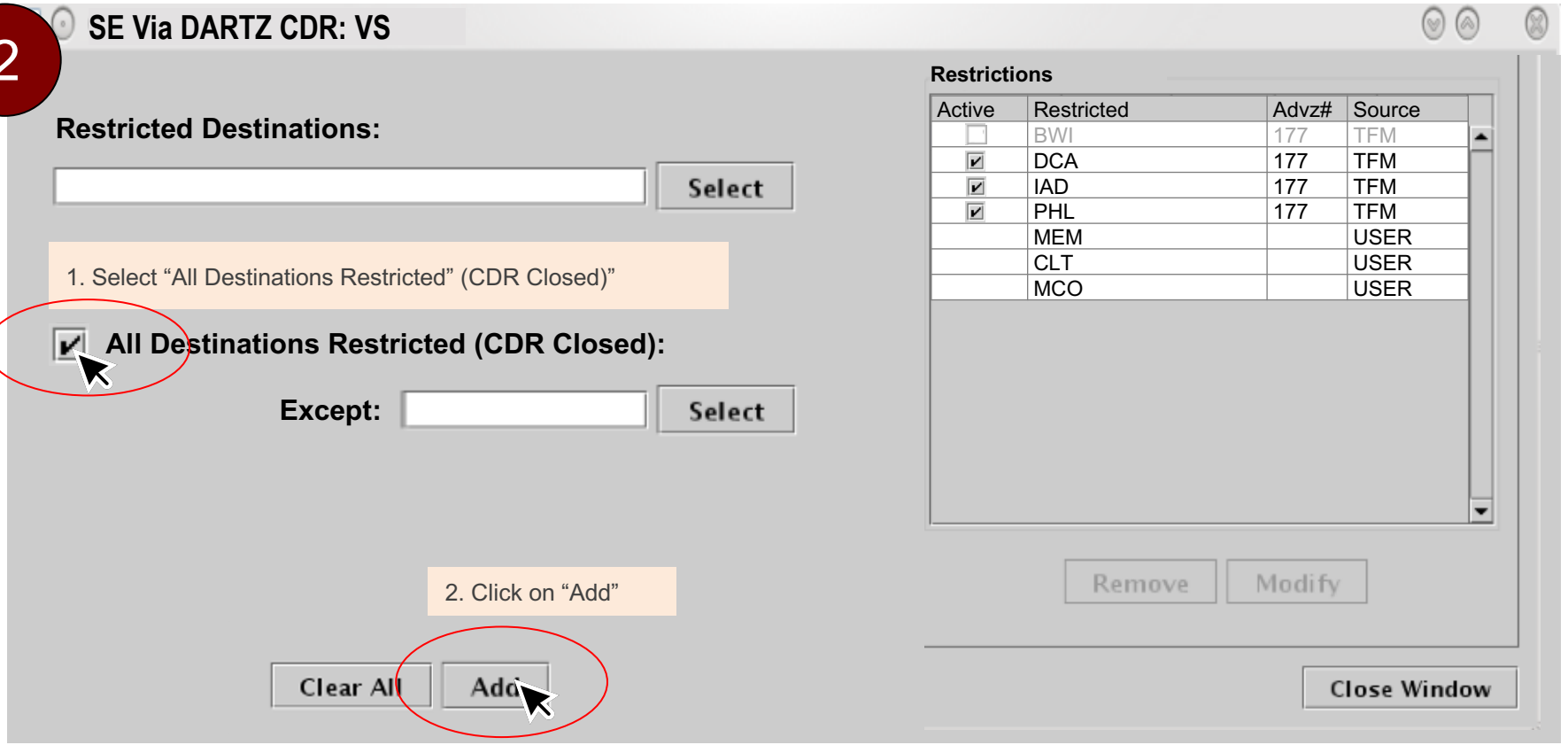
Partial-restrictions are currently in place.

You then decide the CDR needs to be completely closed.

Select the “Set” button to access the CDR Settings Window.

Example – Close CDR

2



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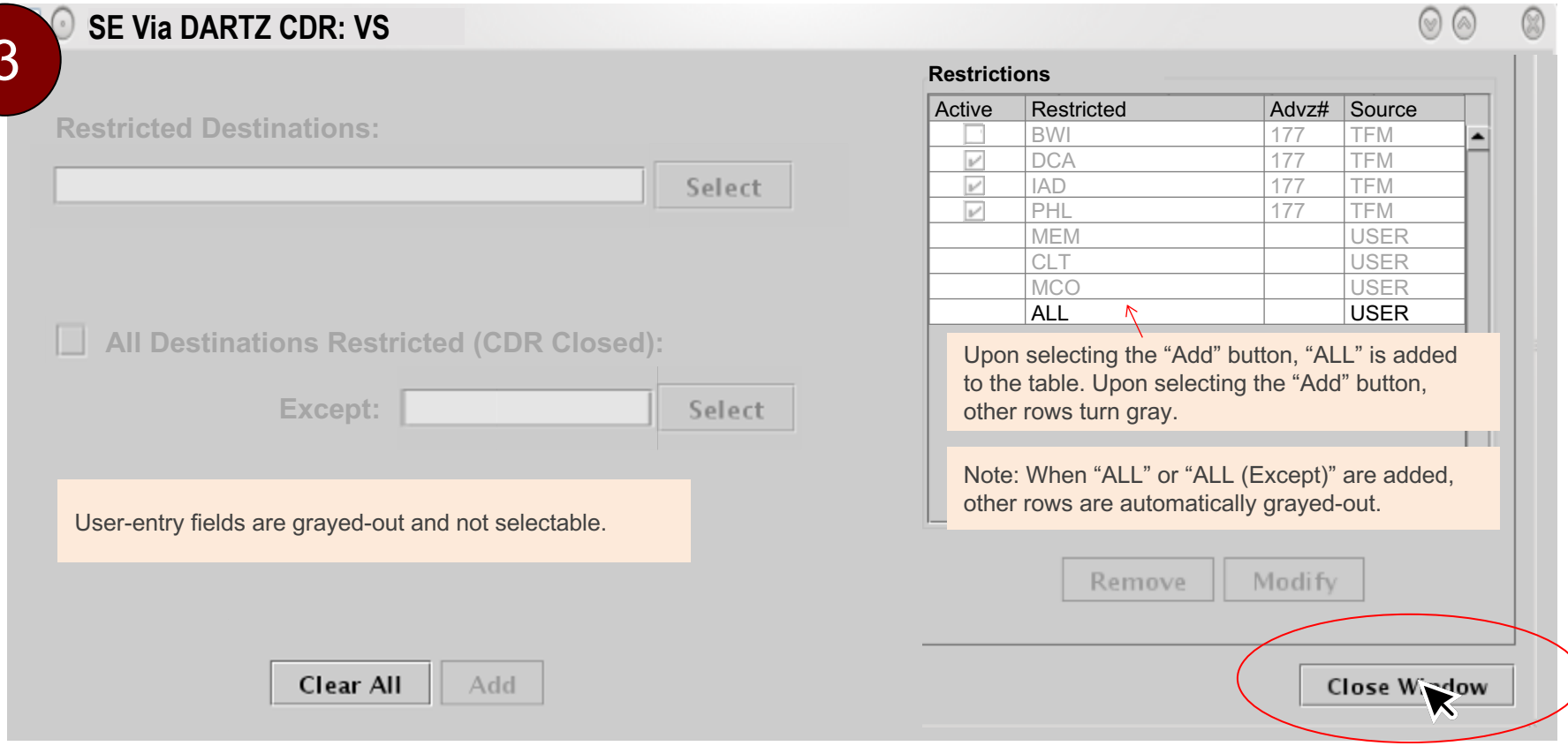
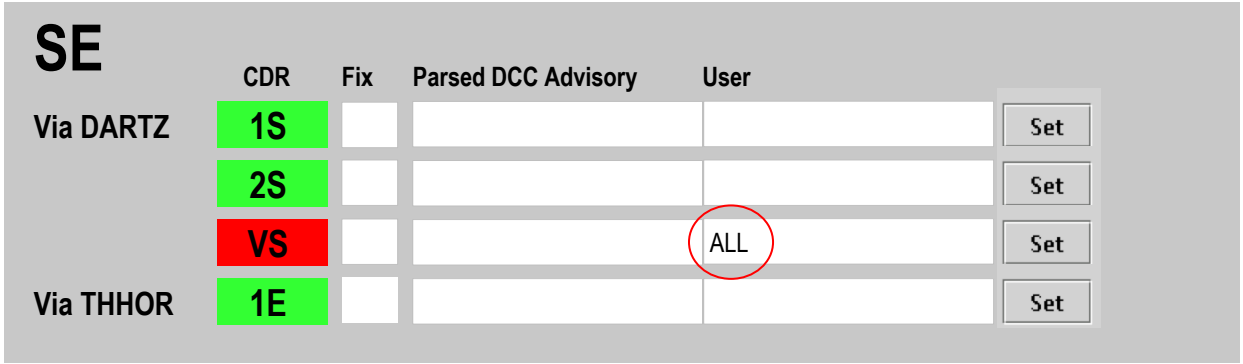
Example – Close a CDR

3



4

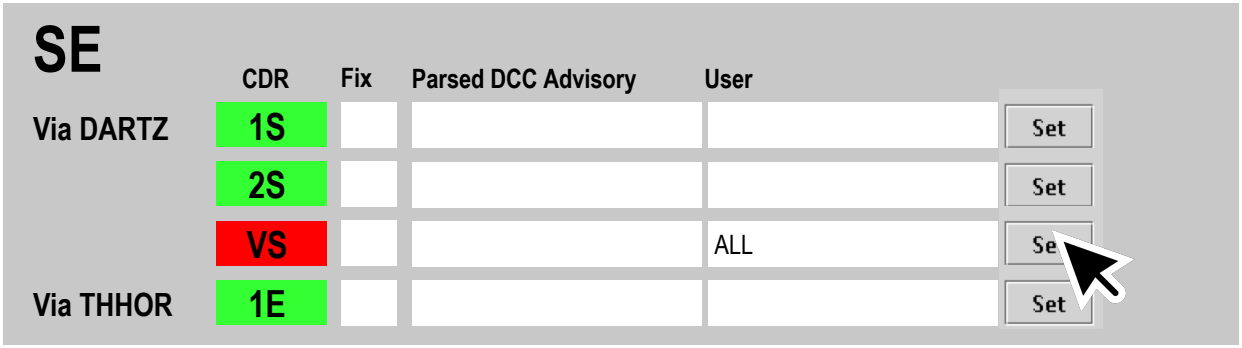


3. On the TOS Operation Tab, "ALL" is displayed.

Other destinations (i.e., "Inactive" destinations) are not shown anymore.

Example – Closure with Exception

1



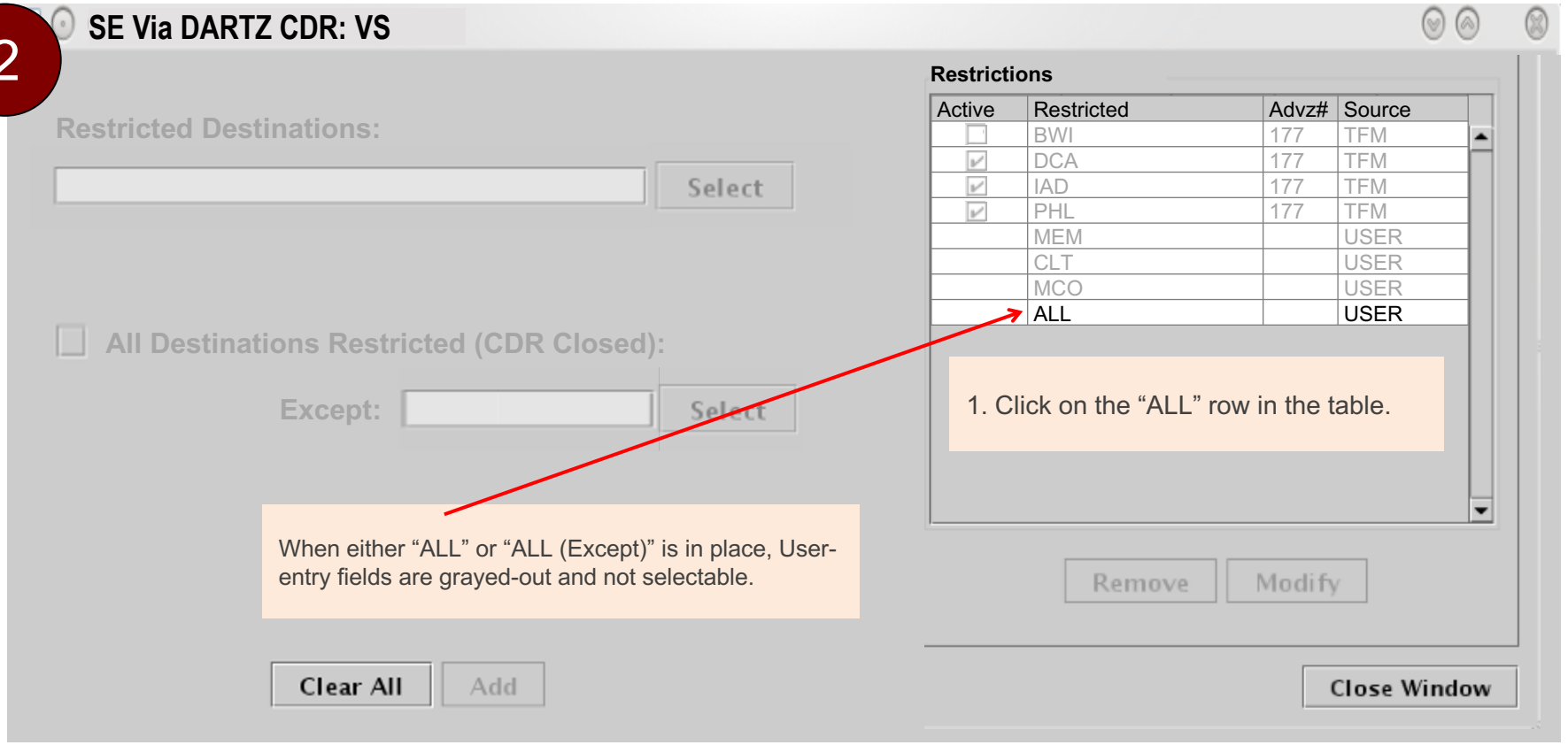
"ALL" indicates that all Destinations are restricted.
The CDR is currently closed.

You then decide the CDR should be closed ... except for "SHV".

Select the "Set" button to access the CDR Settings Window.

Example – Closure with Exception

2



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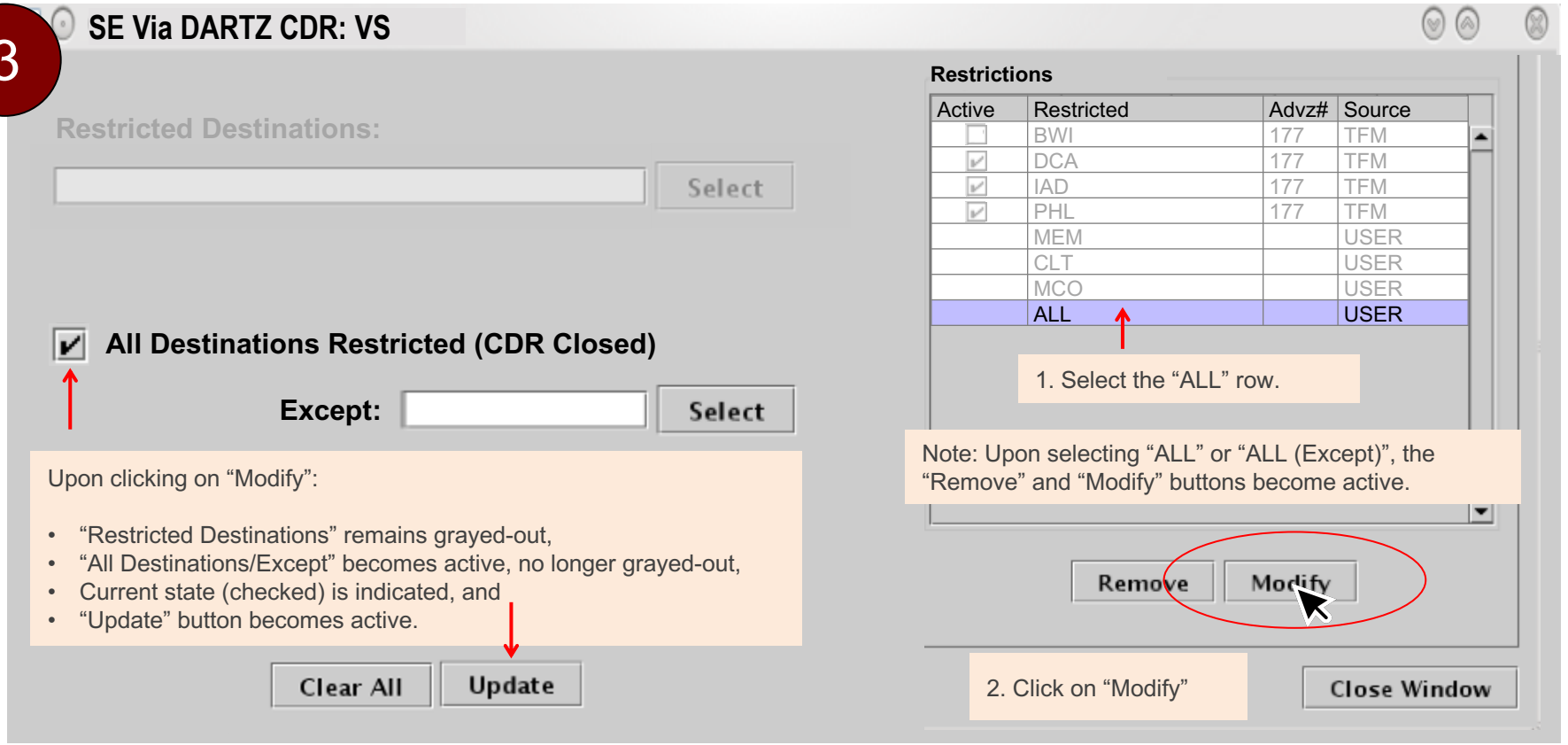
Example – Closure with Exception

3



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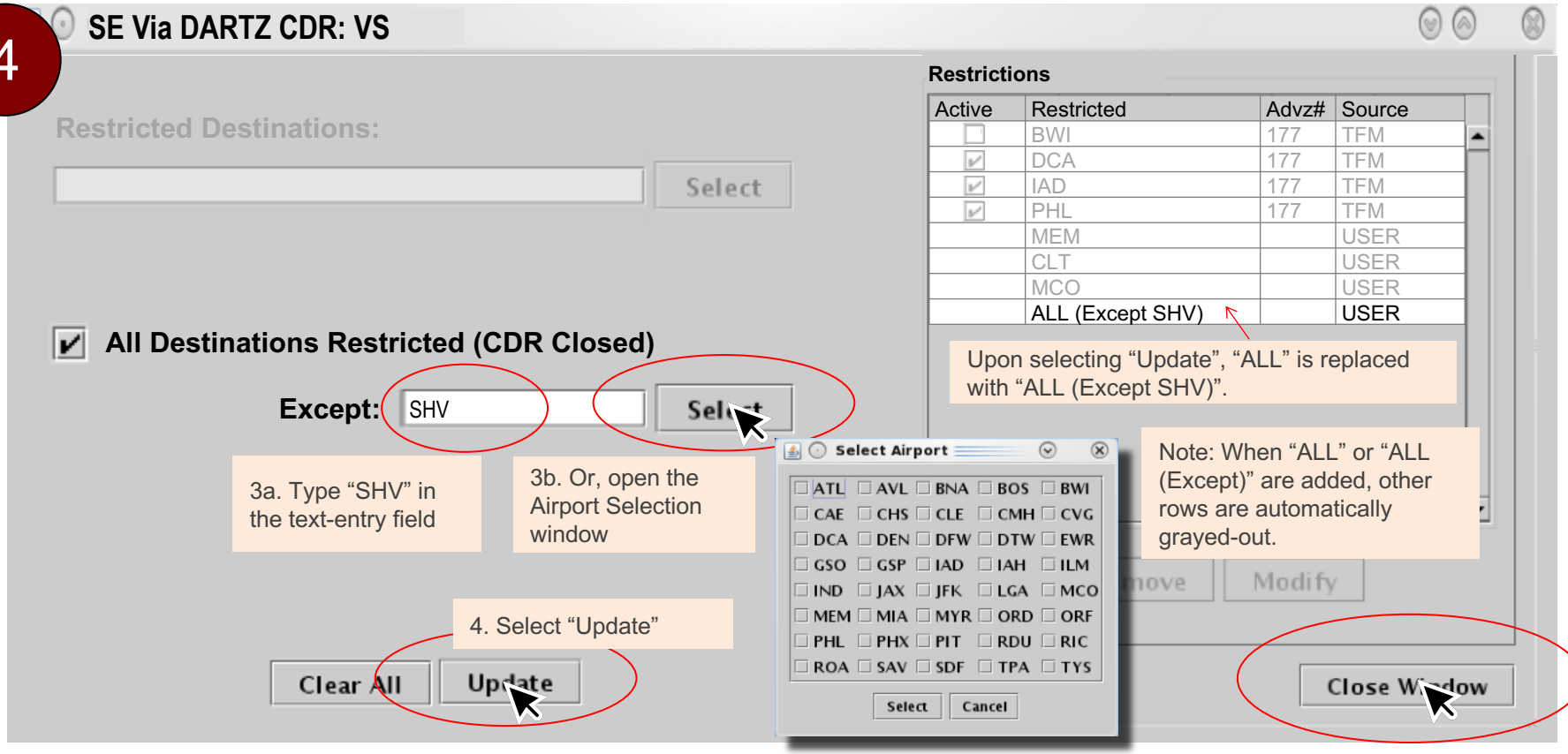
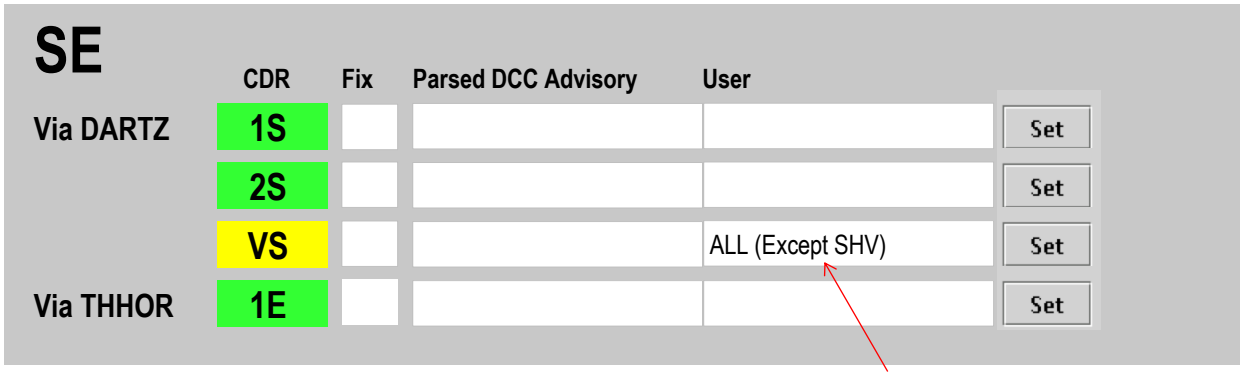
Example – Closure w/ Exception

4



5

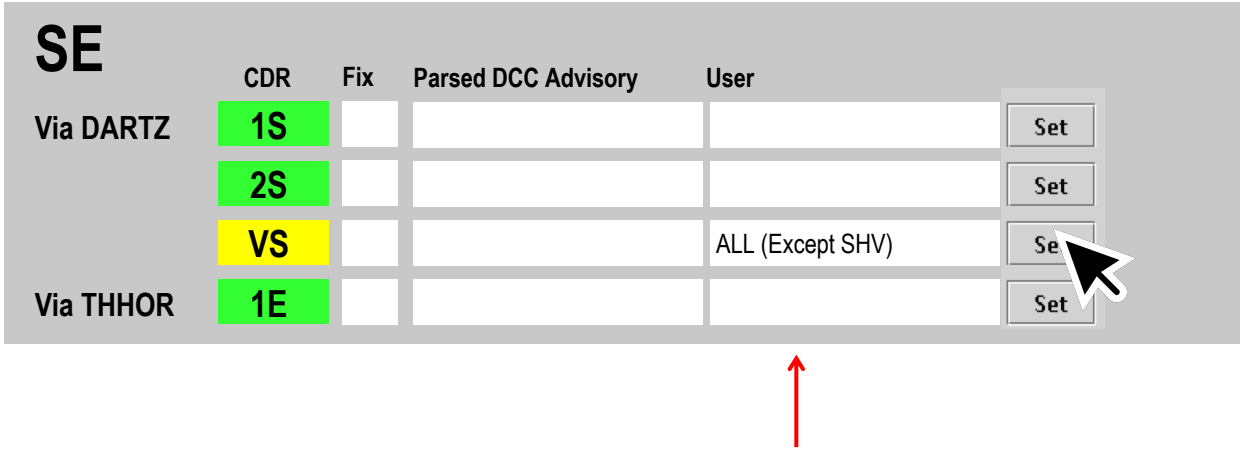


5. On the TOS Operation Tab, "ALL (Except SHV)" is displayed.

Other destinations remain grayed-out.

Example – Open a CDR

1



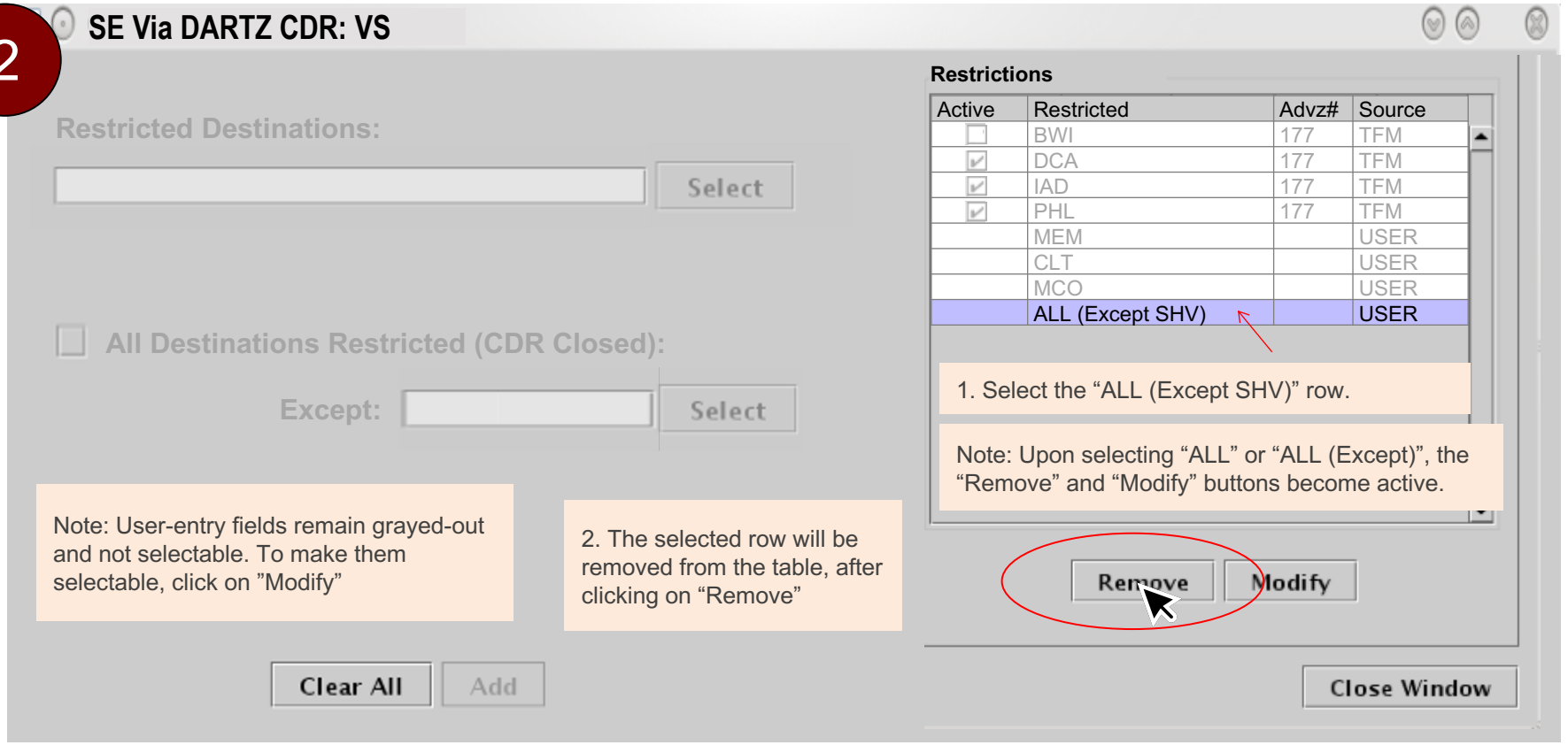
All destinations are restricted, except for SHV.

You then decide to re-open the CDR.

Select the “Set” button to access the CDR Settings Window.

Example – User Opens CDR

2



So ... the first thing the User needs to do is to click on the “ALL” row in the table.

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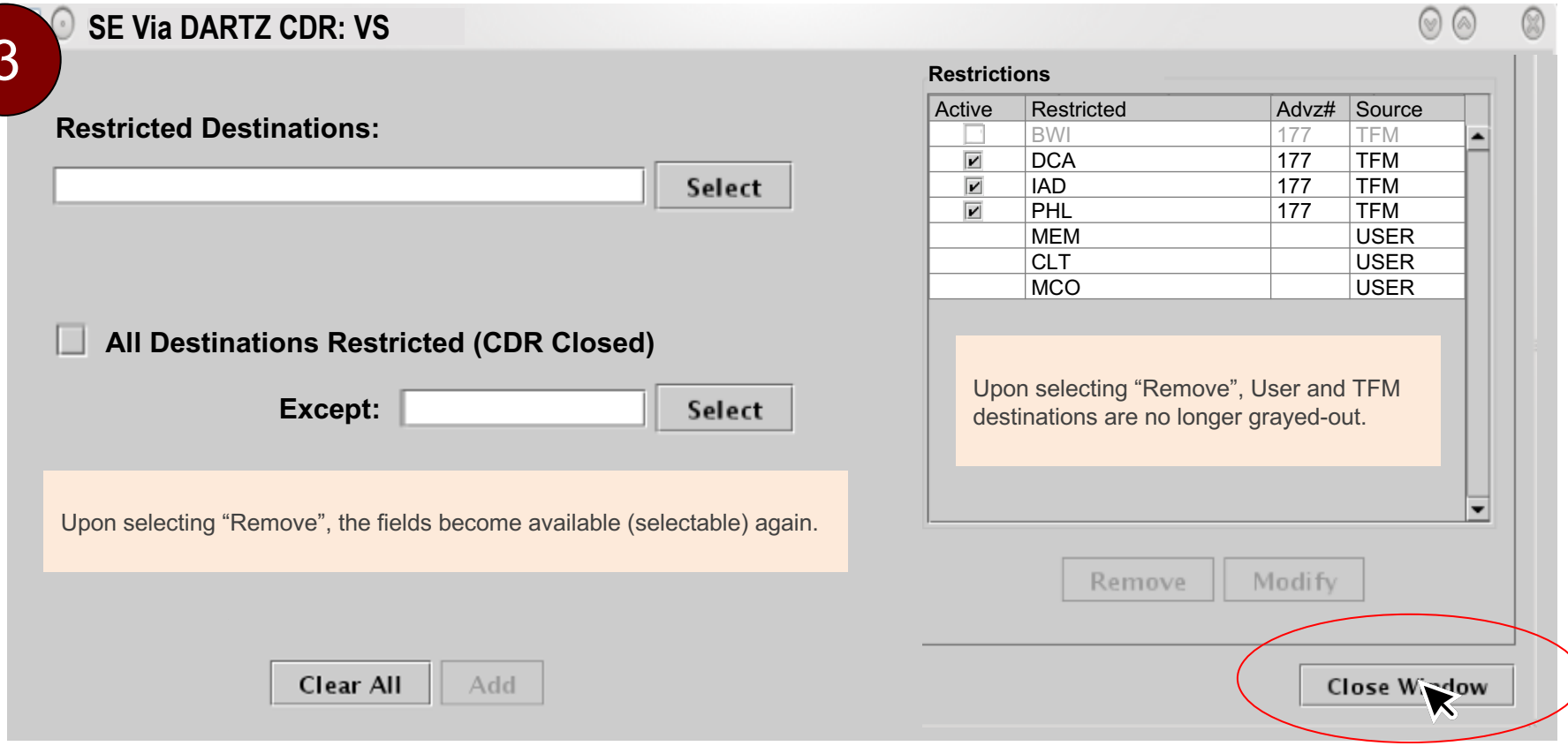
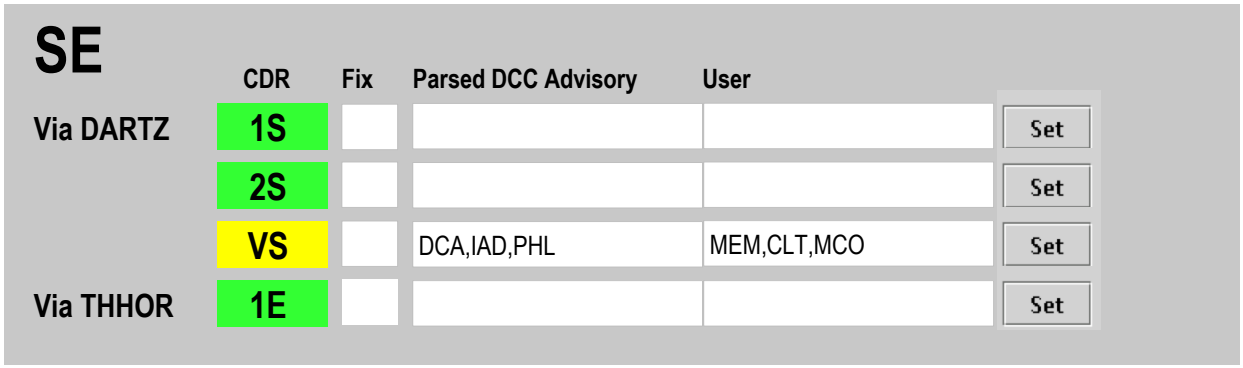
Example – User Opens CDR

3



4



3. On the TOS Operation Tab, “Active” destinations are displayed.

Example – NTML Closure

1

SE

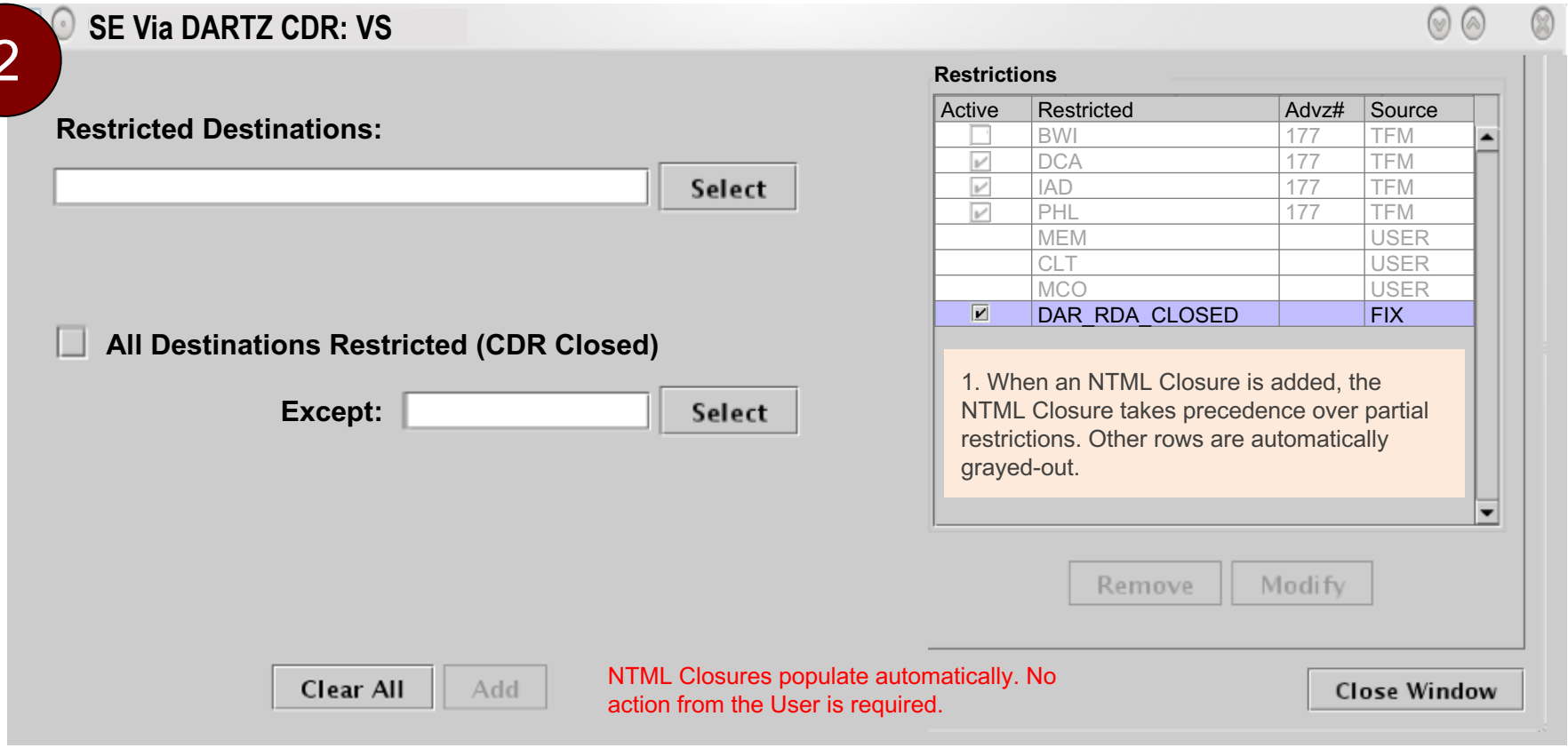
	CDR	Fix	Parsed DCC Advisory	User	
Via DARTZ	1S				Set
	2S				Set
	VS		DCA,IAD,PHL	MEM,CLT,MCO	Set
Via THHOR	1E				Set

Partial-restrictions are currently in place.

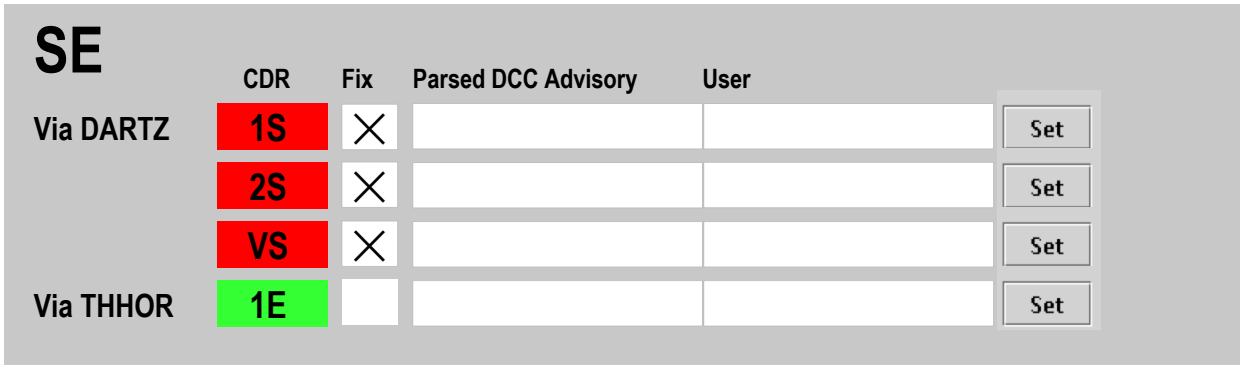
You then enter DARTZ and ARDIA closures in NTML.

Example – NTML Closure

2



3

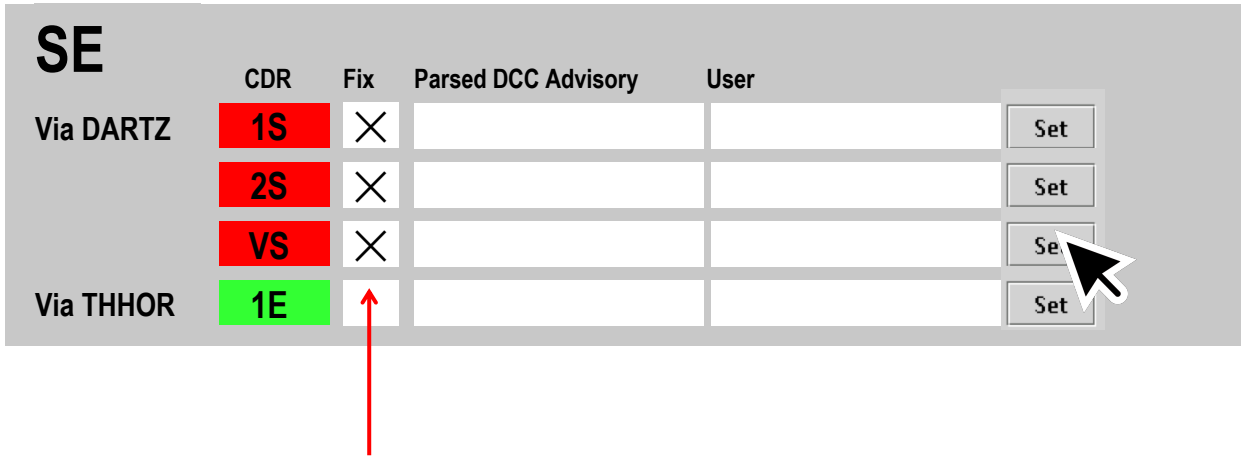


2. On the TOS Operation Tab, NTML column updates with an “X”.

DCC and User destinations are no longer shown.

Example – User Overrides NTML Closure

1



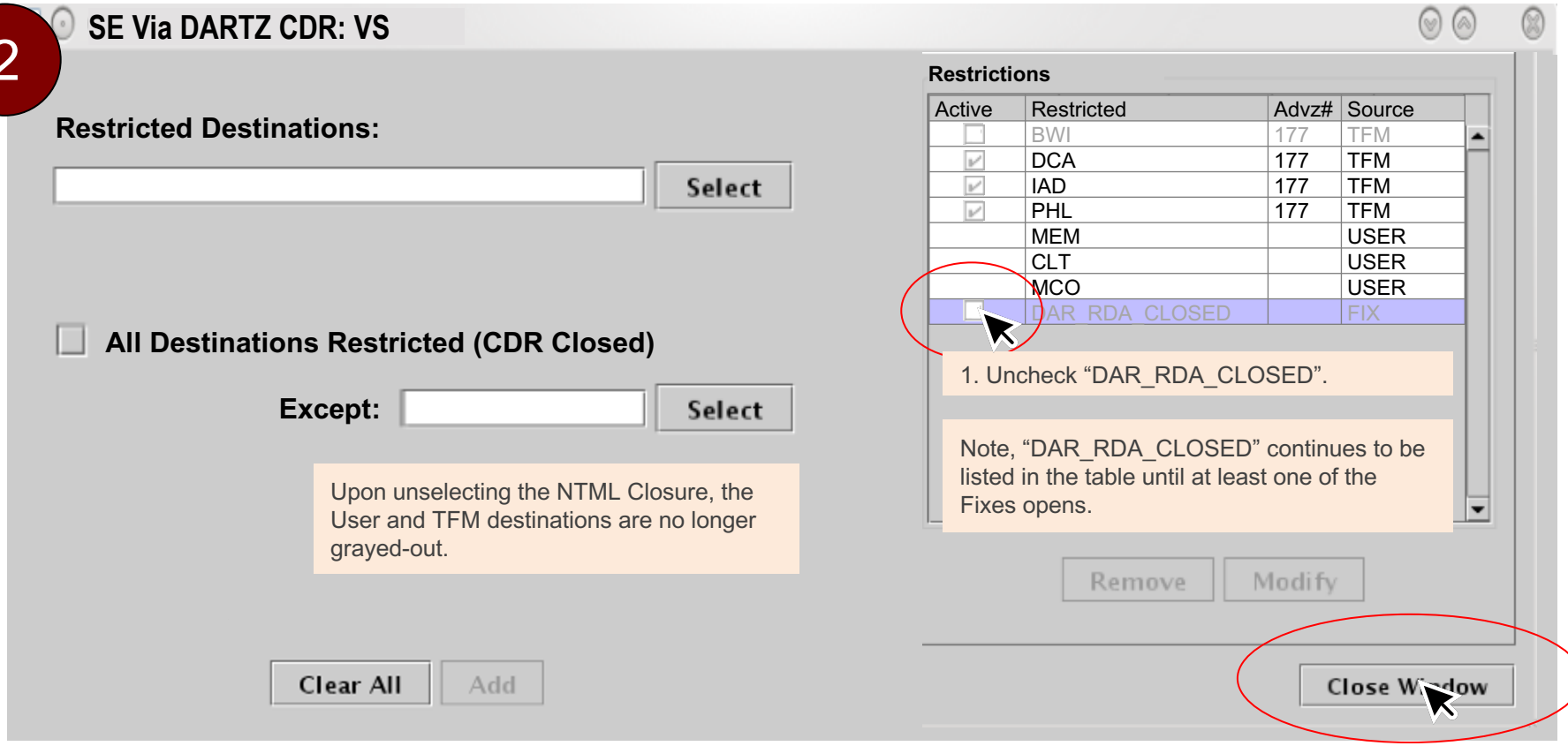
CDR “VS” is closed because of Departure Fix Closures.

You then decide to re-open the “VS” CDR by “overriding” the NTML Closure.

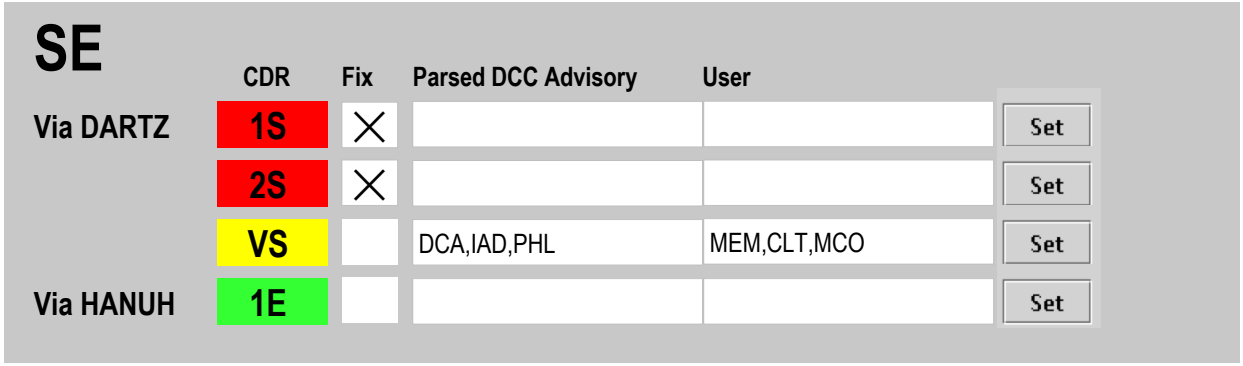
Select the “Set” button to access the CDR Settings Window.

Example – User Overrides NTML Closure

2



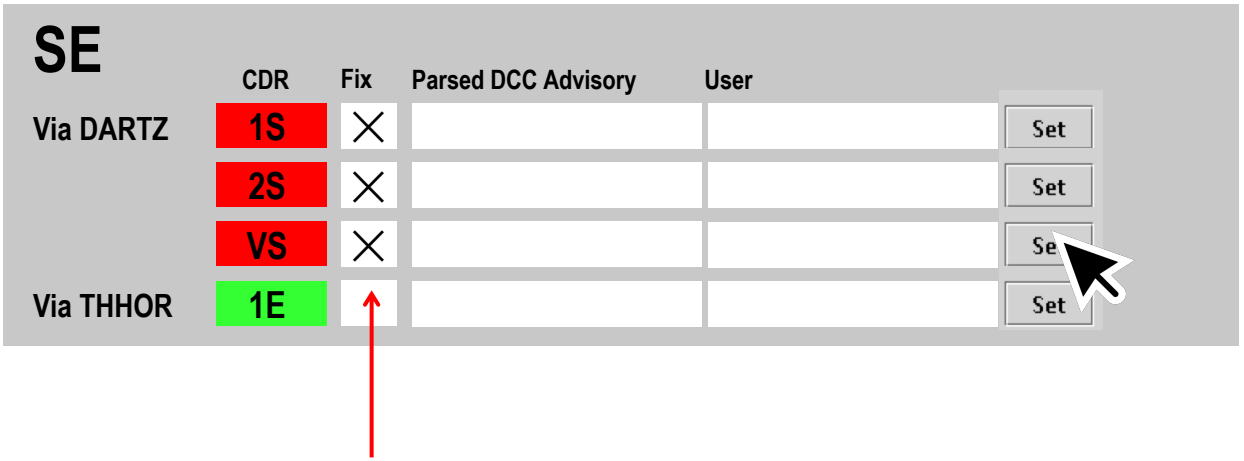
3



2. On the TOS Operation Tab, “Active” destinations are displayed.

Example – An NTML Closure is in place; User Adds an Exception

1



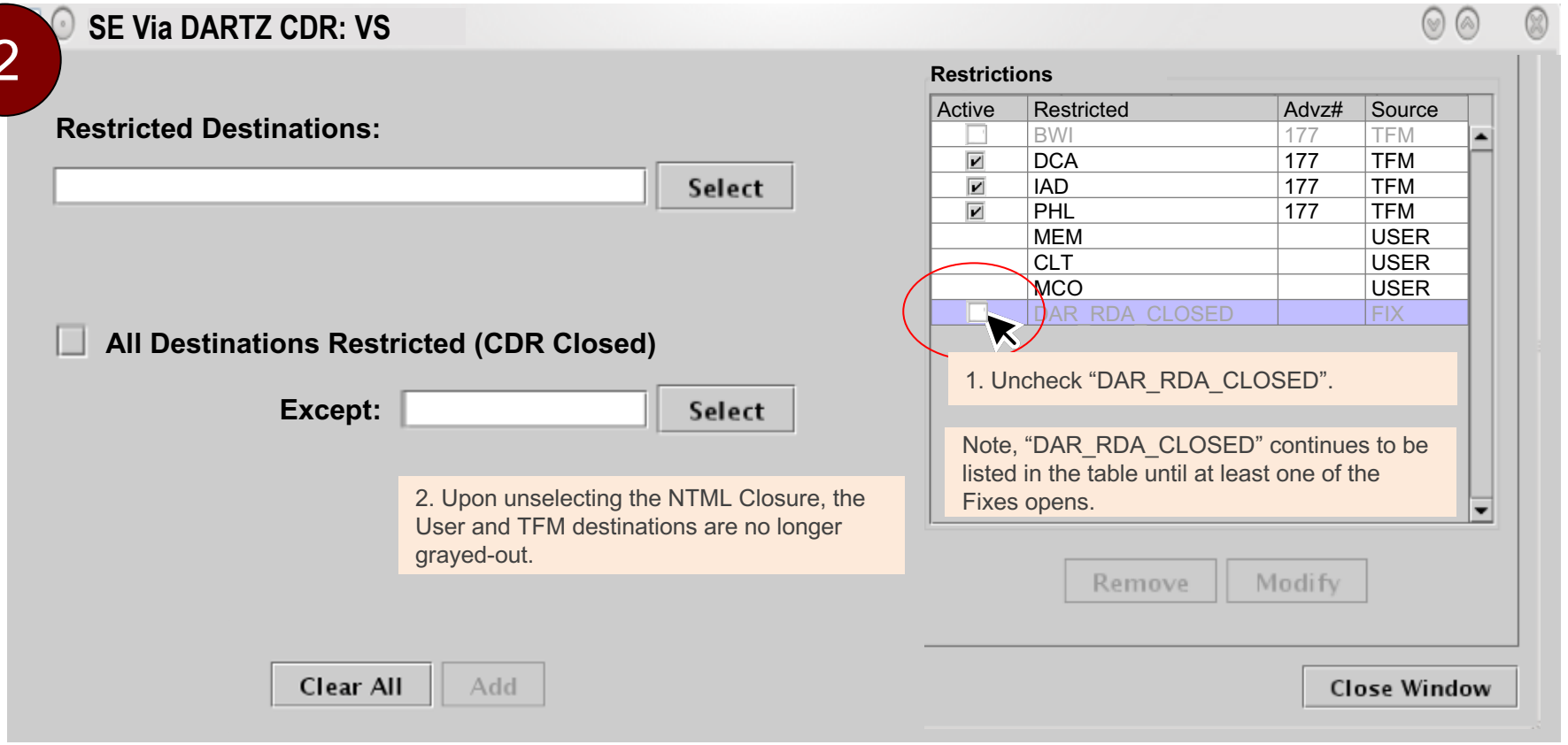
CDR "VS" is closed because of Departure Fix Closures.

You then decide the CDR should be closed ... except for "GGG".

Select the "Set" button to access the CDR Settings Window.

Example – An NTML Closure is in place; User Adds an Exception

2



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Example – An NTML Closure is in place; User Add an Exception

3

SE Via DARTZ CDR: VS

Restrictions

Active	Restricted	Advz#	Source
☐	BWI	177	TFM
☑	DCA	177	TFM
☑	IAD	177	TFM
☑	PHL	177	TFM
	MEM		USER
	CLT		USER
	MCO		USER
☐	DAR_RDA_CLOSED		FIX
	ALL (Except GGG)		USER

Restricted Destinations:

Select

2. User selects "All Destinations Restricted" (CDR Closed)".

All Destinations Restricted (CDR Closed):

Except: GGG Select

Upon selecting the "Add" button, "ALL (Except GGG)" is added to the table.

3a. Type "GGG" in the text-entry field

3b. Or, open the Airport Selection window

Select Airport

ATL	AVL	BNA	BOS	BWI
CAE	CHS	CLE	CMH	CVG
DCA	DEN	DFW	DTW	EWR
GSO	GSP	IAD	IAH	ILM
IND	JAX	JFK	LGA	MCO
MEM	MIA	MYR	ORD	ORF
PHL	PHX	PIT	RDU	RIC
ROA	SAV	SDF	TPA	TYS

Select Cancel

Note: When "ALL" or "ALL (Except)" are added, other rows are automatically grayed-out.

4. Select "Add"

Clear All Add

Move Modify

4

SE

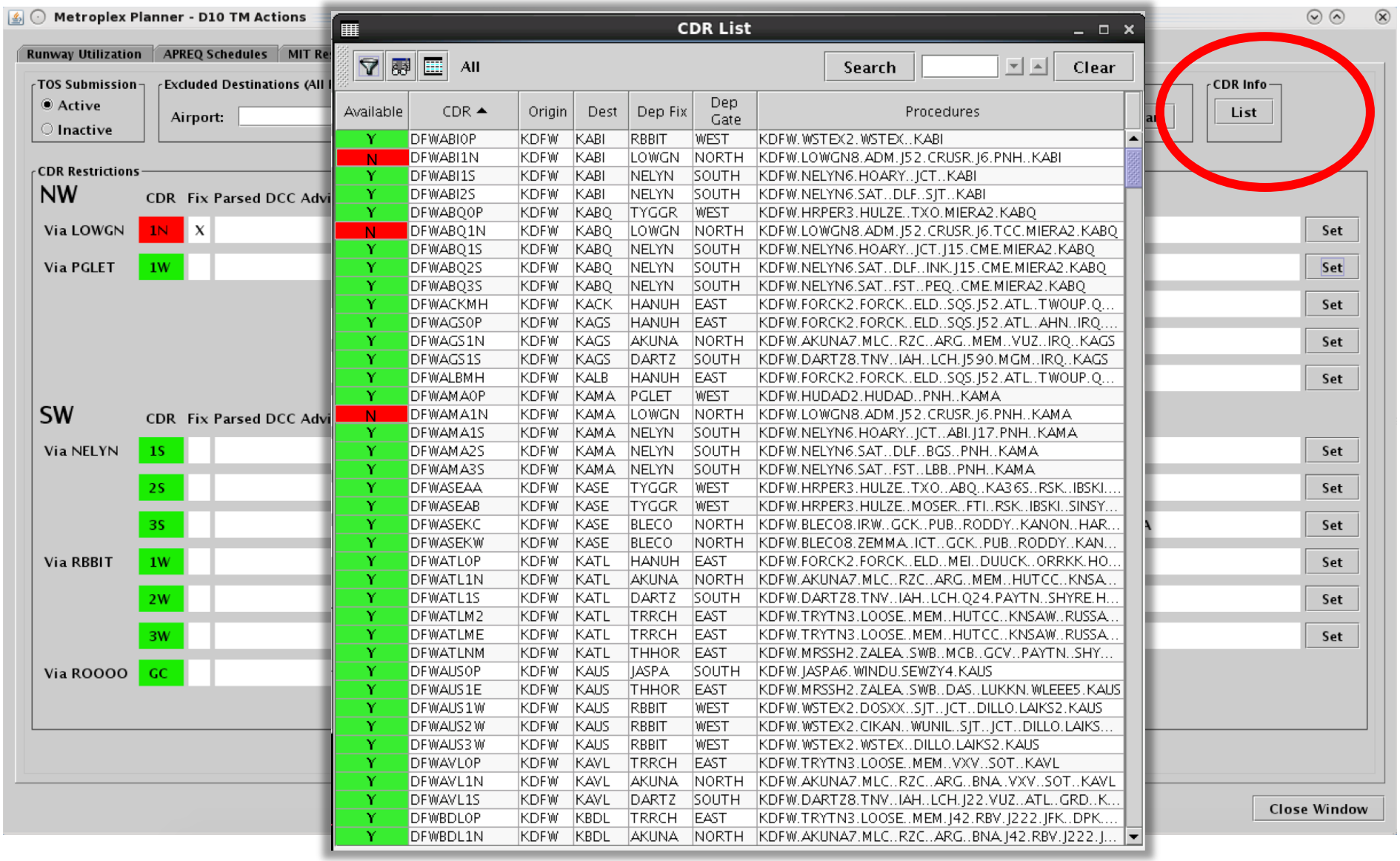
	CDR	Fix	Parsed DCC Advisory	User	
Via DARTZ	1S	X			Set
	2S	X			Set
	VS			ALL (Except GGG)	Set
Via THHOR	1E				Set

5. On the TOS Operation Tab, "ALL (Except GGG)" is displayed.

What If Cases

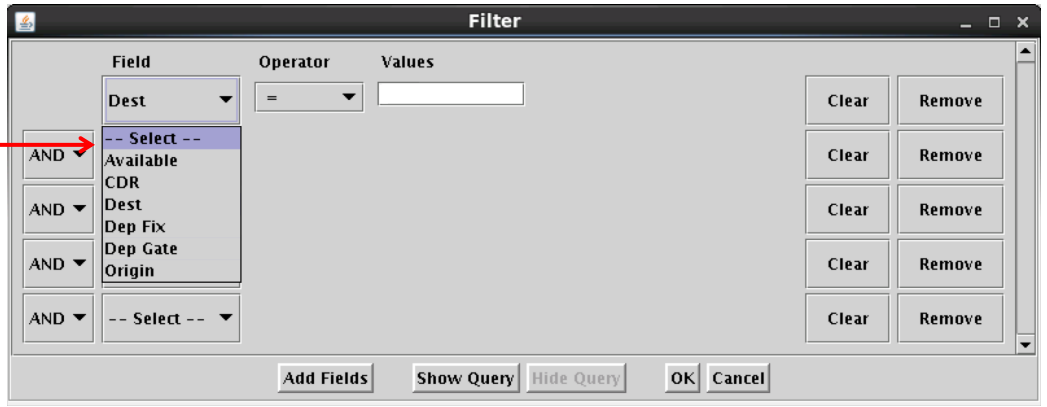
- What if an DCC advisory starts after an NTML entry had closed the CDRs? In this case, the NTML entry will take precedence over the DCC advisory.
- What if an NTML entry starts after a DCC Advisory or manual entries? In this case, the NTML will take precedence.
- What if a DCC advisory duplicates a manual entry? In this case, the manual entry will take precedence of the DCC Advisory.
- What if a new entry duplicates destinations from an existing DCC advisory? This is not allowed. An error message will be displayed.

Access to the CDR List



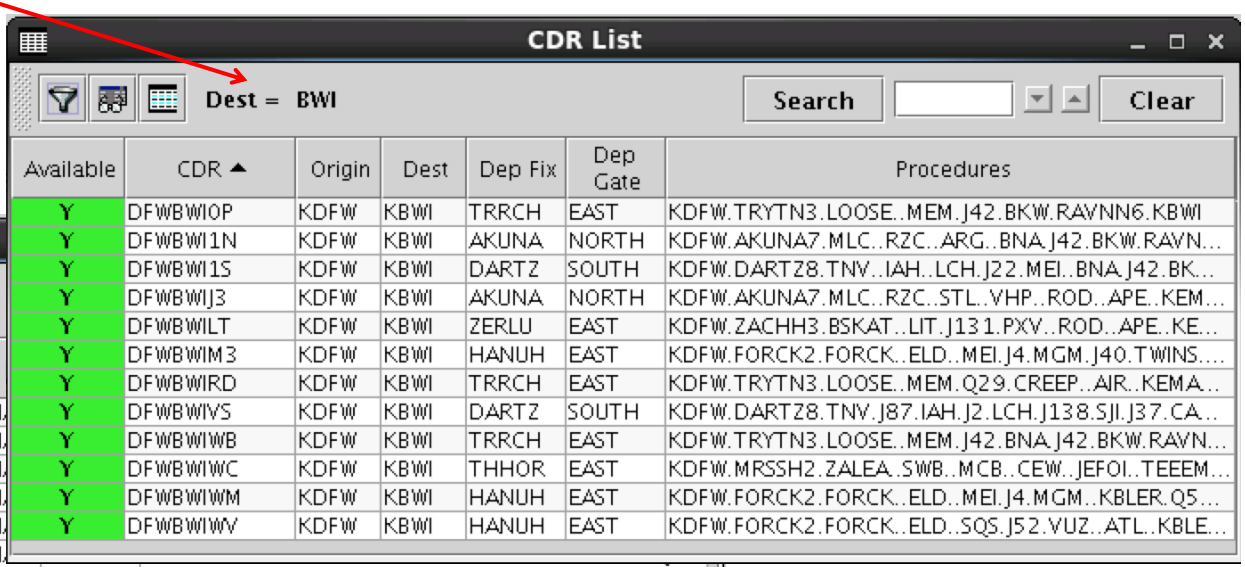
Filter the CDR List

Filter the list based on selected criteria



Examples:

- The list is down-selected to “BWI”
- The list is down-selected to “J3” routes

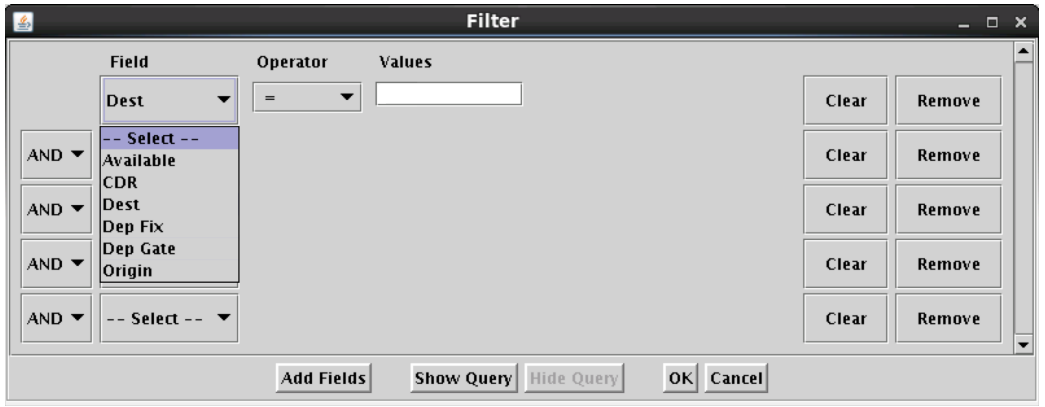


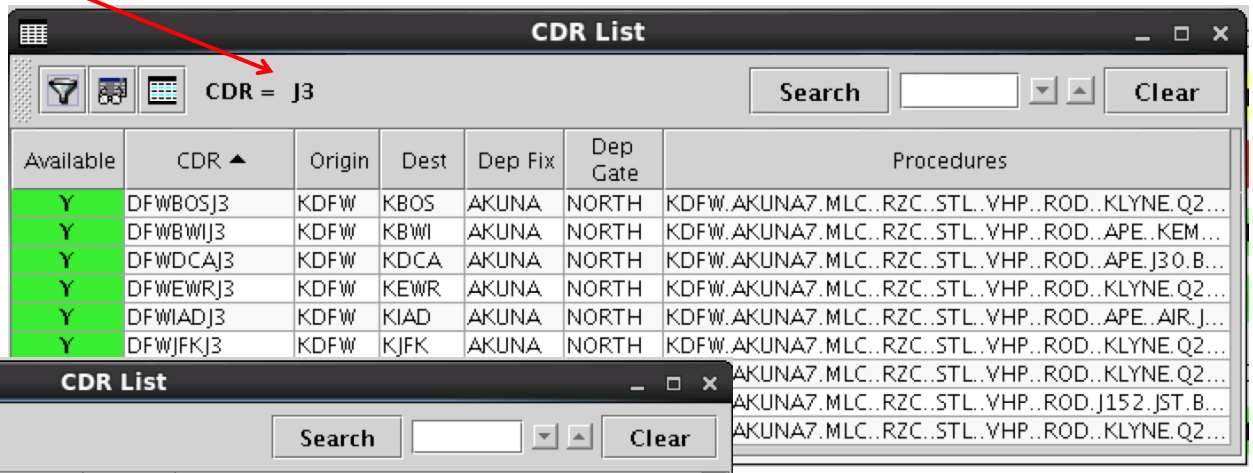
Filter in the CDR List

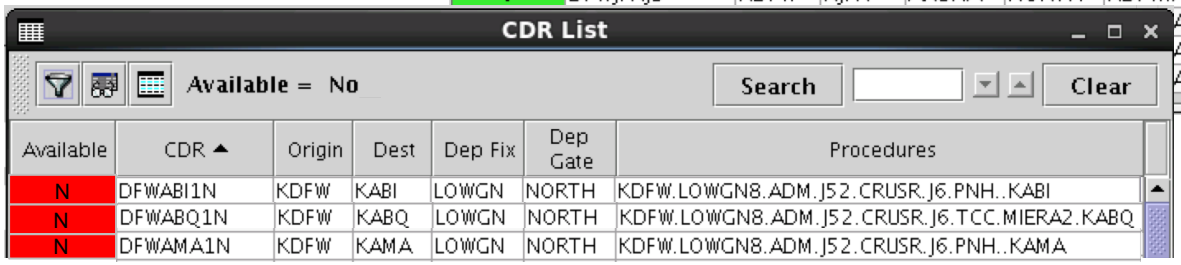
Filter down the list based on selected criteria

Examples:

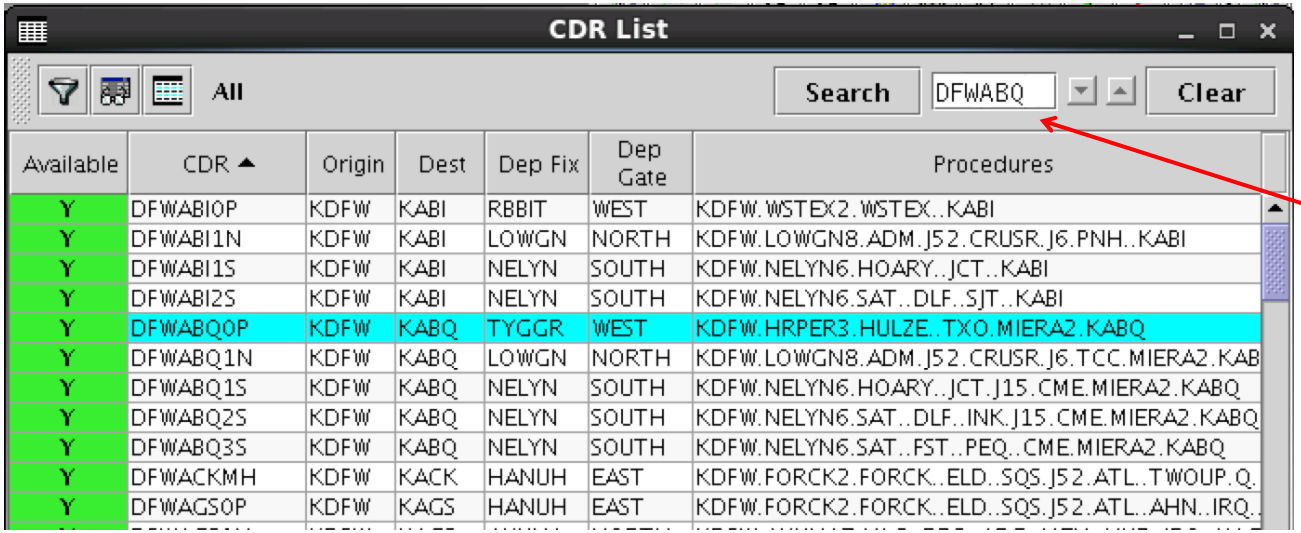
- The list is down-selected to “BWI”
- The list is down-selected to the unavailable routes



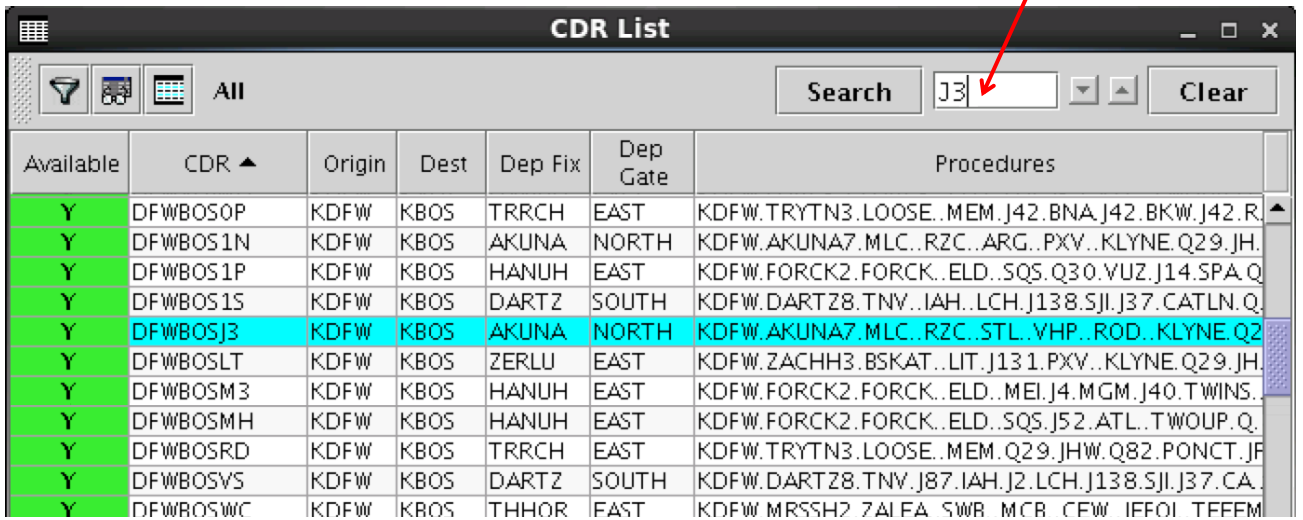




Search a CDR in the List



Use the search window to locate one or more CDRs



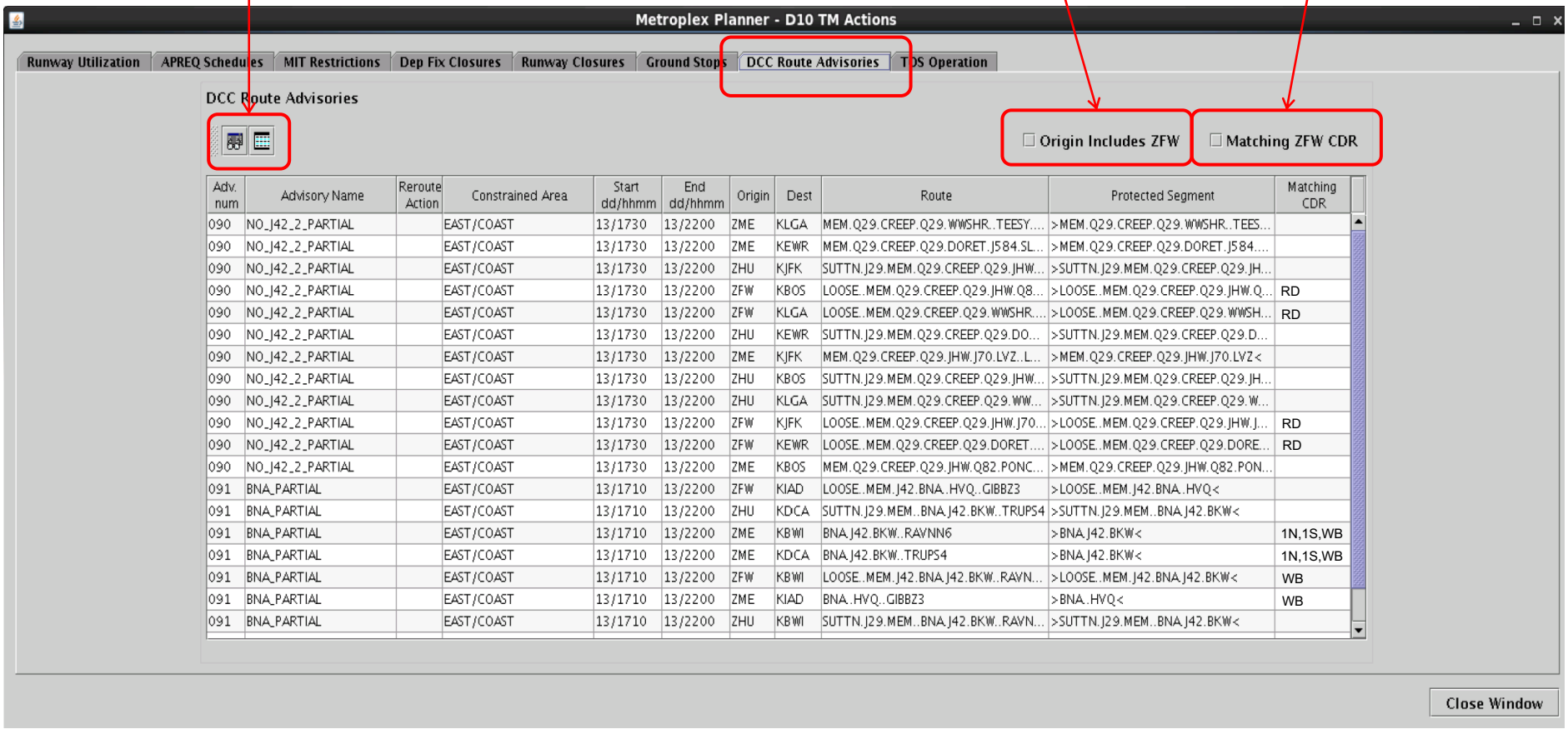
DCC Route Advisories Tab

Features of the DCC Route Advisories Tab

Use Settings to:
1) Select which columns to display in the table
2) To determine rows and field colors

Check the box to see the route advisories applicable to ZFW only

Check to see only the routes that match a CDR



Adv. num	Advisory Name	Reroute Action	Constrained Area	Start dd/hhmm	End dd/hhmm	Origin	Dest	Route	Protected Segment	Matching CDR
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZME	KLGA	MEM.Q29.CREEP.Q29.WWSHR..TEESY....	>MEM.Q29.CREEP.Q29.WWSHR..TEES...	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZME	KEWR	MEM.Q29.CREEP.Q29.DORET.J584.SL...	>MEM.Q29.CREEP.Q29.DORET.J584....	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZHU	KJFK	SUTTN.J29.MEM.Q29.CREEP.Q29.JHW...	>SUTTN.J29.MEM.Q29.CREEP.Q29.JH...	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZFW	KBOS	LOOSE..MEM.Q29.CREEP.Q29.JHW.Q8...	>LOOSE..MEM.Q29.CREEP.Q29.JHW.Q...	RD
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZFW	KLGA	LOOSE..MEM.Q29.CREEP.Q29.WWSHR....	>LOOSE..MEM.Q29.CREEP.Q29.WWSH...	RD
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZHU	KEWR	SUTTN.J29.MEM.Q29.CREEP.Q29.DO...	>SUTTN.J29.MEM.Q29.CREEP.Q29.D...	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZME	KJFK	MEM.Q29.CREEP.Q29.JHW.J70.LVZ..L...	>MEM.Q29.CREEP.Q29.JHW.J70.LVZ<	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZHU	KBOS	SUTTN.J29.MEM.Q29.CREEP.Q29.JHW...	>SUTTN.J29.MEM.Q29.CREEP.Q29.JH...	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZHU	KLGA	SUTTN.J29.MEM.Q29.CREEP.Q29.WW...	>SUTTN.J29.MEM.Q29.CREEP.Q29.W...	
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZFW	KJFK	LOOSE..MEM.Q29.CREEP.Q29.JHW.J70...	>LOOSE..MEM.Q29.CREEP.Q29.JHW.J...	RD
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZFW	KEWR	LOOSE..MEM.Q29.CREEP.Q29.DORET....	>LOOSE..MEM.Q29.CREEP.Q29.DORE...	RD
090	NO_J42_2_PARTIAL		EAST/COAST	13/1730	13/2200	ZME	KBOS	MEM.Q29.CREEP.Q29.JHW.Q82.PONC...	>MEM.Q29.CREEP.Q29.JHW.Q82.PON...	
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZFW	KIAD	LOOSE..MEM.J42.BNA..HVQ..GIBBZ3	>LOOSE..MEM.J42.BNA..HVQ<	
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZHU	KDCA	SUTTN.J29.MEM..BNA.J42.BKW..TRUPS4	>SUTTN.J29.MEM..BNA.J42.BKW<	
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZME	KBWI	BNA.J42.BKW..RAVNN6	>BNA.J42.BKW<	1N,1S,WB
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZME	KDCA	BNA.J42.BKW..TRUPS4	>BNA.J42.BKW<	1N,1S,WB
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZFW	KBWI	LOOSE..MEM.J42.BNA.J42.BKW..RAVN...	>LOOSE..MEM.J42.BNA.J42.BKW<	WB
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZME	KIAD	BNA..HVQ..GIBBZ3	>BNA..HVQ<	WB
091	BNA_PARTIAL		EAST/COAST	13/1710	13/2200	ZHU	KBWI	SUTTN.J29.MEM..BNA.J42.BKW..RAVN...	>SUTTN.J29.MEM..BNA.J42.BKW<	