GTASIDRA

A process integrator with the new SIDRA V8 API

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WHY

WHY

GTA undertakes analysis of a large number of intersections using SIDRA every week across all our offices.

An integrated and standardise work pipeline allows GTA to:

- Increase working performances
- Minimise the risk of errors in data input and SIDRA model development
- Performs automatic consistency checks along the pipeline
- Increase the output quality and simplify reports integration

HOW

HOW

GTASidra is a new service of the GTAnalytics platform which assist in the evaluation of signal performance and signal optimisation

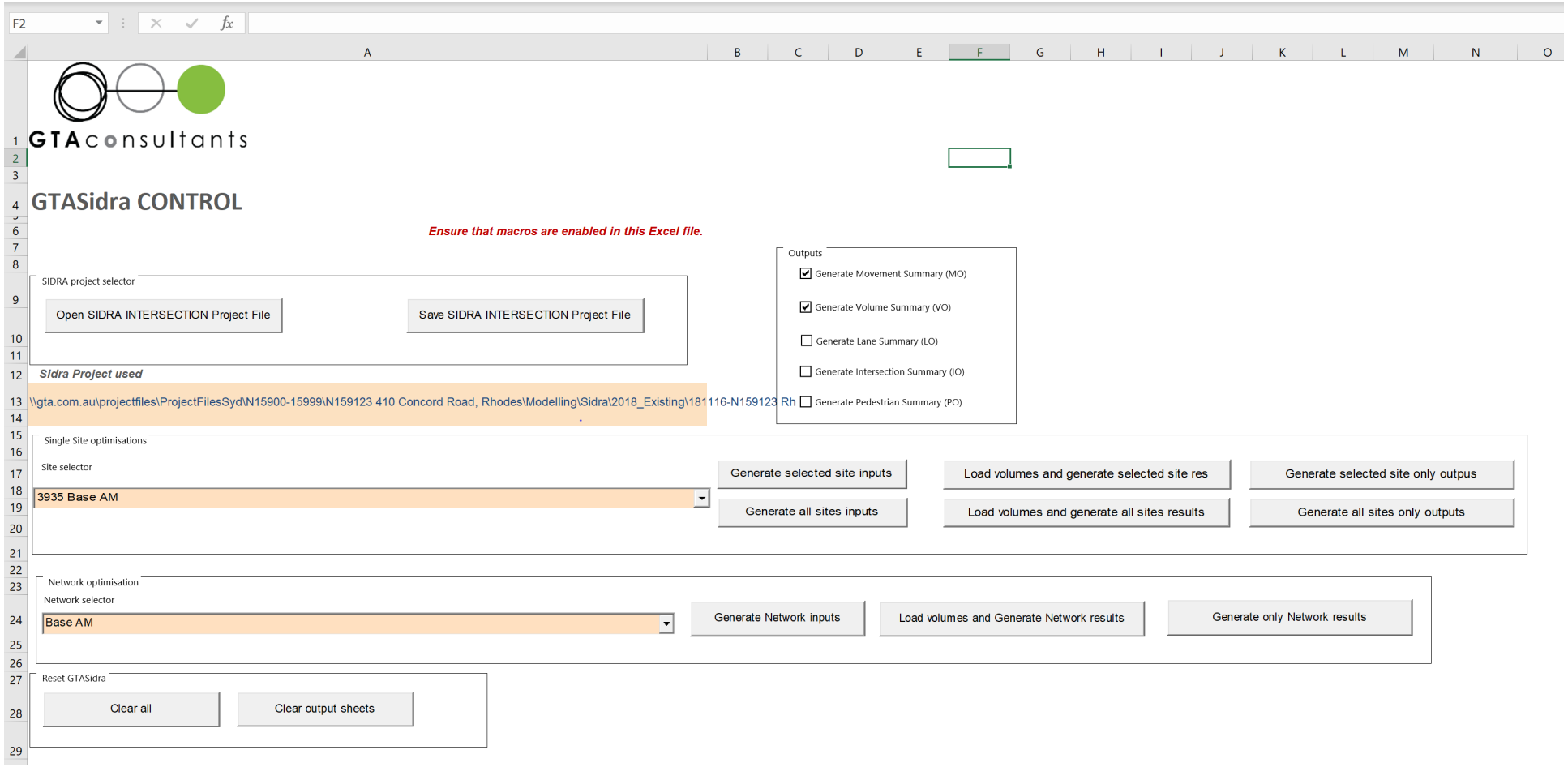
GTA has expanded on the SIDRA Volumes API to do the following:

1. Link to GTAnalytics to automatically obtain integrated traffic volume and travel time information
2. Introduced new functionality to allow processing of multiple site at the one time
3. Developed processing of networks through GTASidra
4. A reporting dashboard ready to be integrated with the standard GTA project reports

WHAT

WHAT

Control sheet



WHAT

GTAnalytics volume input sheet

	A	B	C	D	E	F	G	H	I	J	K	L
1	uid: Ascend	Detector	Time	Average 15 mins volume				OUTPUT		No errors found		
2								Peak hour considered				
3												
4								Total Demand				
5												
6												
7												
8						3935 Base AM						
9						Heavy vehicle composition						
10						Local Street						
11												
12						☐ Use GTAVols volume						
13												
14						Fix hour calculation						
15						☐ Fix target hour						
16												
17						Starting time (one hour from this time)						
18						00:00						
19												
20												
21												
22						Update Volumes & Process						
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												

Insert GTAVols data in 15 mins interval for the time period you want to analyse

(For istance: AM peak from 6 to 10 oclock)
GTASidra will find the peak hour into the interval and will use its volume for the optimization

GTAVols detectors to Signal manoeuvre (Private vehicles)

		Destination (**TO**) Leg							
		S	SE	E	NE	N	NW	W	SW
Origin (**FROM**) Leg	S								
	SE								
	E								
	NE								
	N								
	NW								
	W								
	SW								

GTAVols detectors to Signal manoeuvre (Light rail if present)

		Destination (**TO**) Leg							
		S	SE	E	NE	N	NW	W	SW
Origin (**FROM**) Leg	S								
	SE								
	E								
	NE								
	N								
	NW								
	W								
	SW								

Instruction for filling the GTAVols detectors to Signal manoeuvre

For each manoeuvre (for instance S/N) fill with one or more, delimitated by comma, detector n

For instance:

- 1 - means that detector 1 volume is set to the manoeuvre;
- 1,2,3 - means that the sum of detector 1,2 and 3 volumes are set to the manoeu
- 2(0.5) - means that the 50% of the detector 2 volume is set for the manoeuvre;
- 1,2(0.7),3(0.3),4 - mean that the sum of 100% of detector 1 volume, 70% of det the manoeuvre.

Put GTAVols detector schema picture below for helping to fill the matrix GTAVols detectors to S

Next steps

NEXT STEPS

Next steps:

- Improve detection of model processing errors in GTASidra
- Increase the number of SIDRA model parameters accessible and manageable directly from GTASidra

Thank you

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