

StateCheckpoint		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	asset_id	int
	asset_type	asset_type
	checkpoint_time	timestamp
	state	asset_state
	delta_from_prev_chkpt	asset_state
	peak_delta_from_prev_chkpt	asset_state

Ground Station		
PK	<u>id</u>	int UNIQUE
	name	text UNIQUE
	latitude	double
	longitude	double
	elevation	double
	station mask	double
	uplink rate	double
	downlink rate	double
	under outage	boolean

Schedule		
PK	<u>id</u>	int UNIQUE
	name	text UNIQUE
	reference_time	timestampt
	time_offset	interval
	rejection_cutoff	interval

Satellite		
PK	<u>id</u>	int UNIQUE
	name	text UNIQUE
	storage capacity	double
	power capacity	double
	fov max	double
	fov min	double
	is illuminated	boolean
	under outage	boolean

SatelliteStateChange		
FK1	schedule id	int
FK2	asset_id	int
	asset_type	asset_type
	snapshot_time	timestamp
	state	asset_state

ScheduleRequest		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	asset id	int
FK2	order id	int
IDX	window start	timestamp
IDX	window end	timestamp
	duration	interval

Satellite Eclipse		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	asset id	int
IDX	eclipse start	timestamp
	duration	interval

Scheduled Contact		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	asset id	int
	groundstation id	int
	contact start	timestamp
	duration	interval

Ground Station Request		
PK	<u>id</u>	int UNIQUE
FK1	station id	int
FK2	schedule id	int
IDX	signal acquisition time	timestamp
IDX	signal loss time	timestamp

Scheduled Maintenances		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	maintenance order id	int
FK3	asset id	timestamp
IDX	maintenance start	timestamp
	duration	interval
	description	text
	priority	integer
	status	text

Scheduled Outages		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	outage order id	int
IDX	outage start	timestamp
	duration	interval
	status	text

Outage Order		
PK	<u>id</u>	int UNIQUE
	asset name	text
IDX	start time	timestamp
IDX	end time	timestamp

Image Order		
PK	<u>id</u>	int UNIQUE
	latitude	double
	longitude	double
	priority	integer
	image type	text
	image height	integer
	image width	integer
IDX	start time	timestamp
IDX	end time	timestamp
IDX	delivery deadline	timestamp
	num of revisits	integer
	revisit frequency	integer
	revisit frequency units	text

Schedule Imaging		
PK	<u>id</u>	int UNIQUE
FK1	schedule id	int
FK2	asset id	int
FK3	image order id	int
IDX	uplink contact id	int
IDX	downlink contact id	int
	imaging start	timestamp
	duration	interval
	status	text

Maintenance Order		
PK	<u>id</u>	int UNIQUE
	asset name	text
IDX	start time	timestamp
IDX	end time	timestamp
	duration	time
	repetition	integer
	frequency min gap	integer
	frequency max gap	integer
	operations flag	boolean
	description	text