

WING Reports Specifications

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Document Type

Document Version

Document location [SharePoint URL]

Version	Status	Date	Author	Reviewed by	Description of changes
0.1	Draft	22-06-2021	Richa Gupta	Nokia	Initial Draft – Containing High Priority Reports
0.2					
0.8	Approved		Richa Gupta	Nokia, CKH IOD	
0.9	Updated	09-12-2022	Emma Smith		Merged Rated CDR spec with reports spec.
1.0	Updated	31-01-2023	Sharat Mohan	Nokia, CKH IOD	Updated Subscriber Delta, Subscriber Status, SIM Additions, Account Snapshot reports to have fields for groups. Updated Subscriber Delta: event_type field description to include all the possible values. Added missing field "csp_acc_cf_1" in different reports. Included Api Usage Report: account id field can contain *
1.1	Updated	07-02-2023	Supriya		Added "Data Type" and "Mandatory" columns to R01, R02, R03, R04, and Rated CDR Report Marked the availability level (CSP or both users) for each report. Updated the copyright information Formatting and typo correction. Added "List of Tables"
1.2	Updated	24-02-2023	Emma Smith	Nokia, CKH IOD	Added Network Profile to subscriber status report. Updated Rated CDR Report specification to include charging_id and event_subtype new columns. Updated the definition of volume_consumed and added explanatory section for the handling of terminated sessions vs ongoing sessions at month end
1.3	Updated	06-03-2023	Sharat Mohan	Nokia, CKH IOD	Added Section 2.13 Daily Data Usage report
1.4	Updated	15-03-2023	Sharat Mohan	Nokia	Added "from_info_id", "from_info_name", "to_info_id", "to_info_name" fields in Subscriber Delta report to capture changes done for all event types. Include event_type - addGroup, updateGroup, deleteGroup instead of groupChange
1.5	Updated	22-03-2023	Sharat Mohan	Nokia	Added " isBillable" field in Subscriber Status and Account Snapshot report



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1 Introduction to Reports

This document captures report specifications for off the shelf reports of WING Digital Hub.

1.1 Scope

This document includes the reports available to both CSP and Enterprise users. Refer to the below table to identify the availability level (only CSP or both CSP and Enterprise) and other details of the reports.

Table 1-1: Description of available Reports

ID	Report Name	Report Name in Nokia WDH	Description	Report Frequency	Report Format	Availability Channel	Availability Level
R01	SIM Status Change Report	Subscriber Delta Report	Reports each change in a SIM's network status, billing status or logistics status	Daily	ТХТ	GUI, API, SFTP	CSP and Enterprise
R02	SIM Inventory Report	SIM Inventory Report	Reports each SIM Resource Status	Daily	TXT	GUI, API, SFTP	CSP
R03	SIM Card Overview Report	Subscriber Status Report	Provide a high-level view of all the SIM cards assigned to the Enterprises	Daily	ТХТ	GUI, API, SFTP	CSP and Enterprise
R04	Account Snapshot Report	Account Snapshot Report	A daily report for the defined accounts, their status (billable and account status) and the account details such as name, id's, customer emails and addresses	Daily	ТХТ	GUI, API, SFTP	CSP and Enterprise
R05	SIM addition Report	Sim Addition Report	Reports all SIM cards that were assigned to the customer in the previous day	Daily	ТХТ	GUI, API, SFTP	CSP and Enterprise
R06	MSISDN Pool Report	MSISDN Pool Overview Report	Reports statistics of all MSISDN pools that are dedicated to the customer	Daily	TXT	GUI, API, SFTP	CSP
R07	User Overview Report	<u>User</u> <u>Overview</u> <u>Report</u>	Reports all user accounts that can access the WING CMP	Daily	TXT	GUI, API, SFTP	CSP
R08	Priceplan Overview Report	Rate Plan Utilization Report	Reports the number of SIMs per price plan	Daily	TXT	GUI, API, SFTP	CSP



ID	Report Name	Report Name in Nokia WDH	Description	Report Frequency	Report Format	Availability Channel	Availability Level
R09	Pool Usage Report		Reports a monthly summary by rate plan (for Pool rate plans), rate plan type (fixed, flex) and rating zone, of usage charges based on each SIM's assigned rate plan and rating zone. Does not include activation fees, subscription fees or other charges	Monthly	TXT	GUI, API, SFTP	CSP and Enterprise
R10	Solo Plan Usage Report		Reports a monthly summary of Non Pooled Usage, by SIM, of usage charges per each SIM's assigned rate plan and rating zone. Does not include activation fees, subscription fees, or other charges	Monthly	TXT	GUI, API, SFTP	CSP and Enterprise
R11	Audit Log (Upscope requirement)	API Usage Report	1) WING CMP has the capability to provide to the Operator or Operator Reseller, audit logs detailing actions taken by each logged in user or API's including as a minimum: username, IP Address, action performed, system accessed, successful, unsuccessful status, date/time stamp. (2) WING CMP has the capability to provide to the Operator or Operator Reseller, audit logs detailing actions taken by including as a	Daily	TXT	GUI, API, SFTP	CSP



ID	Report Name	Report Name in Nokia WDH	Description	Report Frequency	Report Format	Availability Channel	Availability Level
			minimum: user account used for API, IP Address, action performed, system accessed, successful, unsuccessful status, date/time stamp, transaction id.				
		Rated CDR Report	This report captures format of the rated CDR generated by WING Digital Hub. Rated CDRs will be transferred by SFTP on a daily basis.	Daily	TXT	GUI, API, SFTP	CSP
		Daily Data Usage Report	Reports a daily summary of Data Usage by Subscriber. For voice and sms daily usage, please refer Rated CDR report	Daily	ТХТ	GUI, API, SFTP	CSP and Enterprise

Note: WING Digital Hub supports downloading of reports from the portal in '.txt (pipe delineated)' format.

2 Report Specification

Note: All the headers of the report columns will be in lower case, either in running format (without spaces) or separated by underscore (i.e. wing_account_id). Data Type mentioned for reports in this document are as per definition in the Postgre SQL specification. Mandatory field information is subjected to change as per new feature introduction or feature enhancement.

Additional fields may be added to the end of reports as per new feature introduction or feature enhancement. Customer should ensure that they are able to continue to process the report in such case.

2.1 Ro1 - Subscriber Delta Report

The **Subscriber Delta Report** is available to both **CSP and Enterprise** users. It is a daily report containing details of any changes for a Subscriber (ICCID). Changes can be related to SIM state, rate plan, network profile, APN group, etc. This report provides a log of all changes taking place for a SIM; multiple changes in subscription within a single day will be captured as multiple rows with timestamp too.

Note: ICCID which has not undergone any change within 24 hours will not be available in the report.

Table 2-1: Description of Subscriber Delta Report

#	Field Name	Field Description	Data Type	Mandatory
1	iccid	ICCID identifying the SIM	varchar(255)	Υ
2	msisdn	MSISDN identifying the SIM. This field will be populated without '+'. e.g. 5338250200	varchar(30)	N
3	imsi	IMSI identifying the SIM	varchar(30)	Υ



4	wing_account_id	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1 This account ID could be a master account or a sub-account.	int8	Y
5	wing_account_nam e	Enterprise account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	Y
6	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	int8	N
7	wing_master_acco unt_id	WDH Account ID at the 'master-account level' (L1). If account ID in column #4 is a master account, then this field will contain the same information as #4.	varchar(255)	Y
8	wing_master_acco unt_name	Enterprise account name as setup in WDH for the master account.	varchar(255)	Υ
9	ext_customer_id2	Ext-BSS customer ID that must be mapped to WDH master account. This ties the external BSS to WING.	varchar(255)	N
10	rate_plan_id	ID of rate plan for event_type "ratePlanChange"	int8	N
11	rate_plan_name	Name of rate plan for event_type "ratePlanChange"	varchar(255)	N
12	event_type	Capture the transition type: stateChange, ratePlanChange, networkProfileChange, tagChange, apnGroupChange, roamingProfileChange, accountChange, addGroup, updateGroup, deleteGroup	varchar(255)	Y
13	initial_activation_d ate	Date and time (in UTC + TZ) the SIM was first activated in the current account. This is the original activation date (regardless if 10 days or 500 days ago). Activation is when the SIM has begun consuming network resources, regardless of Trial or Active status. Thus, Activated = TRIAL or ACTIVE. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp(0)	N
14	sim_status	SIM billing status as per SIM lifecycle for event_type "stateChage". Possible values are as per assigned lifecycle state model. E.g. ENTERPRISE-INVENTORY, TRIAL, ACTIVE, SUSPENDED, DEACTIVATED, RETIRED.	varchar(255)	N
15	change_date_time	Date/Time the change took effect. Date/Timestamp value would be stored with milliseconds. All intermediate changes within the day are captured as separate row entries with timestamp. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp	Y
16	csp_acc_cf_1	The value stored within the account-level custom field with the name "opcoid" (non-case-sensitive). This column will populate for every ICCID. For example, ckhat.	text	Y
17	rate_plan_version	The version of the rate plan (assigned with the ICCID).	int4	N
18	group_id	Group_id associated with the SIM	int4	N
19	group_name	Group Name	varchar(255)	N
20	from_info_id	Id of previous object for the corresponding event_type, e.g if event_type is 'networkProfileChange' then this field contain id of network profile before change	varchar(255)	N
21	from_info_name	name of previous object for the corresponding event_type, e.g if event_type is 'networkProfileChange' then this field contain name of network profile before change	varchar(255)	N
22	to_info_id	Id of current object for the corresponding event_type, e.g if event_type is 'networkProfileChange' then this field contain id of network profile after change	varchar(255)	N



23	to_info_name	name of current object for the corresponding	varchar(255)	N
		event_type, e.g if event_type is 'networkProfileChange'		
		then this field contain id of network profile after change		

2.2 Ro2 - SIM Inventory Report

The **SIM Inventory Report** is available to **CSP** users only. It provides the SIM inventory view for CSP. This is a Snapshot report and will capture the SIM status at the EoD. When rm_sim_status is 'ALLOCATED' then it means that the SIM is assigned to an Enterprise account.

Table 2-2: Description of SIM Inventory Report (CSP)

#	Field Name	Field Description	Data Type	Mandatory
1.	iccid	ICCID identifying the SIM	varchar(255)	Υ
2.	imsi	IMSI identifying the SIM	varchar(255)	Υ
3.	msisdn	MSISDN number, e.g. 5338250200. This field	varchar(255)	N
		will be populated without '+'.		
4.	wing_account_id	WING Digital Hub (WDH) Account ID which	int8	N
		owns the ICCID in column #1. This account ID		
		could be a master account or a sub-account.		
5.	wing_account_name	Enterprise account name as setup in WDH, e.g.	varchar(255)	N
		Maria Café Ltd.		
6.	ext_customer_id1	External Customer ID associated with WDH	varchar(255)	N
		account (wing_account_id). Generally, the		
		value in this field maps to the corresponding		
		customer account number in the CSP's billing		
		system.		
7.	wing_master_account_id	WDH Account ID at the 'master-account level'	int8	N
		(L1). If account ID in column #4 is a master		
		account, then this field will contain the same		
		information as #4.		
8.	wing_master_account_name	Enterprise account name as setup in WDH for	varchar(255)	N
		the master account.		
9.	ext_customer_id2	Ext-BSS customer ID that must be mapped to	varchar(255)	N
		WDH master account. This ties the external		
		BSS to WING.		
10.	account_type	Reseller or Enterprise. Remain blank if SIM is	varchar(255)	N
		with CSP.		
11.	rm_sim_status	Current SIM status in the resource manager at	varchar(255)	Υ
		EOD. This is different to the SIM subscription		
		lifecycle. Possible values are: CSP-INVENTORY,		
		AVAILABLE, ALLOCATED, DEALLOCATED,		
		PURGED.		
12.	uploaded_on	Date / Time when the SIM was uploaded to the	timestamp	Υ
		WDH resources database. YYYY-MM-		
		DDTHH:mm:ss format i.e. 2021-11-		
		11T13:23:52		
13.	status_change_date	Date / Timestamp (in UTC) of the last change	timestamp	N
		captured at the EOD. (When changes from one		
		status to another. Any status change should be		
		updated.). Intermediate changes within the		
		day are not captured. YYYY-MM-DDTHH:mm:ss		
		format i.e. 2021-11-11T13:23:52		



14.	csp_acc_cf_1	The value stored within the account-level	text	N
		custom field with the name "opcoid" (non-		
		case-sensitive). This column will populate for		
		every ICCID. For example, ckhat.		

Note: The following fields will be blank for an ICCID which is in CSP-INVENTORY/AVAILABLE status: wing_account_id, wing_account_name, ext_customer_id1, account_type, master_account_id, master_account_name, ext_account_id2, msisdn (depends on SIM file)

2.3 Ro3 - Subscriber Status Report

The **Subscriber Status Report** is available to both **CSP and Enterprise** users. It is a daily snapshot report containing rate plans associated with every subscriber in the system. This report consists of the details when SIM is assigned to an Enterprise. SIM billing status captured will be the one at the EOD. Hence every SIM(ICCID) will only ever have 1 status against it for the day. This report will not capture any SIM status changes that the SIM has undergone during a period of 24-hours.

Table 2-3: Description of Subscriber Status Report

#	Field Name	Field Description	Data Type	Mandatory
1	iccid	ICCID identifying the SIM	varchar(255)	Υ
2	imsi	IMSI identifying the SIM	varchar(30)	Υ
3	msisdn	MSISDN identifying the SIM. This field will	varchar(30)	N
		be populated without '+'. e.g.		
	 -	5338250200	1 (255)	1
4	imei	IMEI of the device associated with the SIM. This field will be blank if the	varchar(255)	N
		underlying network does not provide this		
		information.		
5	sim_status	Current SIM billing status at EOD as per	varchar(255)	Υ
		SIM lifecycle. Possible values are as per		
		assigned lifecycle state model. E.g.		
		ENTERPRISE-INVENTORY, TRIAL, ACTIVE,		
		SUSPENDED, DEACTIVATED, RETIRED.		
6	wing_account_id	WING Digital Hub (WDH) Account ID	int8	Y
		which owns the ICCID in column #1. This		
		account ID could be a master account or a		
		sub-account.		
7	wing_account_name	Enterprise account name as setup in	varchar(255)	Υ
		WDH, e.g. Maria Café Ltd.		
8	ext_customer_id1	External Customer ID associated with	varchar(255)	N
		WDH account (wing_account_id).		
		Generally, the value in this field maps to		
		the corresponding customer account		
		number in the CSP's billing system.		
9	wing_master_account_id	WDH Account ID at the 'master-account	int8	Υ
		level' (L1). If account ID in column #6 is a		
		master account, then this field will		
		contain the same information as #6.		
10	wing_master_account_name	Enterprise account name as setup in WDH	varchar(255)	Υ
		for the master account.		
11	ext_customer_id2	Ext-BSS customer ID that must be	varchar(255)	N
		mapped to WDH master account. This ties		
		the external BSS to WING.		
		the external BSS to WING.		



4.2		Time of account with self. (16)		V
12	account_type	Type of account w.r.t. column #6 i.e. Reseller or Enterprise	varchar(255)	Υ
13	rate_plan_id	ID of rate plan in WING Digital Hub (WDH)	int8	Υ
		assigned to this ICCID at the time of		
		taking this snapshot.		
14	rate_plan_name	Rate plan name associated to the ID.	varchar(255)	Υ
15	subscription_fee	Monthly Recurring Charges of Rate Plan.	numeric(21,2)	N
		Read this field in reference to		
		'rateplan type'. If prepaid then it will		
		hold prepaid_bundle_charge, if individual		
		plan then it will hold sim_mrc and if pool		
		plan then it will hold the sim_mrc.		
16	apn	Access point name(s) assigned to the	text	Υ
		ICCID. If there are multiple APNs assigned,		
		then this field will carry an array of all		
		assigned APNs. E.g. ["wing.iot",		
		"smartmeters.io", "ota.io"], if no apn		
		assigned then this field will be blank.		
17	ip address	Static IP Address assigned to the ICCID.	text	N
	· -	Dynamic allocated IP address are not		
		tracked in this field. i.e. ["10.5.23.1",		
		"10.5.55.101"]. if no ip assigned then this		
		field will be blank.		
18	sim_custom_fields	A JSON array, name-value pairs, of all	text	N
		custom attributes assigned to this ICCID		
		at the time of taking this snapshot.		
		Example: [{"name": "sector", "value":		
		"manufacturing"}, {"name": "vehicle_no",		
		"value": "MP066609"}]		
19	initial_activation_date	Date / Timestamp (in UTC) the ICCID	timestamp	N
		became active in the current account.		
		This should be the original activation date		
		(regardless if 10 days or 500 days ago).		
		Activation is when the SIM has begun		
		consuming network resources, regardless		
		of Trail or Active. YYYY-MM-		
		DDTHH:mm:ss format i.e. 2021-11-		
		11T13:23:52		
20	status_change_date	Date / Timestamp (in UTC) of the last	timestamp	N
		change captured at the EOD. (When		
		changes from one status to another. Any		
		status change should be updated.).		
		Intermediate changes within the day are		
		not captured. YYYY-MM-DDTHH:mm:ss		
		format i.e. 2021-11-11T13:23:52		
21	deact_date	Date / Timestamp when the SIM was	timestamp	N
		Retired (not deactivated). YYYY-MM-		
		DDTHH:mm:ss format i.e. 2021-11-		
		11T13:23:52		
22	currency	A 3-letter representation of the currency	varchar(255)	Υ
		as per ISO 4217 standard. This value is		
		setup in WDH for the account in column		
		#6. Example: EUR, USD, GBP.		
1 - 1-				_



23	rate_plan_version	Version of the rate plan (assigned with	int4	Υ
23	rate_plan_version	the ICCID). This feature is under	11114	
		development for now.		
24	csp_acc_cf_1	The value stored within the account-level	text	Υ
		custom field with the name "opcoid"		
		(non-case-sensitive). This column will		
		populate for every ICCID. For example,		
		ckhat.		
25	rate_plan_type	Type of rate plan. Possible Values are:	varchar(255)	Υ
		Individual, Flex-Pool, Fixed-Pool,		
		Individual Bundle, Flex-Pool Bundle,		
		Fixed-Pool Bundle		
26	group_id	Group_id associated with the SIM	int4	N
27	group_name	Group Name	varchar(255)	N
28	network_profile	Name of the network profile associated	varchar(255)	Υ
		with the SIM.		
29	isBillable	Indicates whether the account is billable	bool	N
		(True/False)		

2.4 RO4 - Account Snapshot Report

The **Account Snapshot Report** is available to both **CSP and Enterprise** users. It is a report containing static data for all enterprise accounts in WING Digital Hub.

Table 2-4: Description of Account Snapshot Report

#	Field Name	Field Description	Data Type	Mandatory
1	tenant_id	WDH CSP ID	varchar(255)	Υ
2	wing_account_id	WING Digital Hub (WDH) Account ID. This account ID could be a master account or a sub-account.	int8	Y
3	wing_account_name	Enterprise account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	Υ
4	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	varchar(255)	N
5	wing_master_account_id	WDH Account ID at the 'master-account level' (L1). If account ID in column #2 is a master account, then this field will contain the same information as #2.	int8	Υ
6	wing_master_account_name	Enterprise account name as setup in WDH for the master account.	varchar(255)	Υ
7	ext_customer_id2	External Customer ID associated with WDH master account (master_account_id). This is the corresponding customer account number in the CSP's billing system.	varchar(255)	N
8	wing_account_status	Status of the account in WDH (column #2)	varchar(255)	Υ
9	billing_currency	Currency associated with the account; Bill will be generated in this currency.	varchar(255)	Υ
10	contact_person_name	Name of primary contact for the account	text	Υ



11	contact_number	Phone number of primary contact for the account, can be with or without '+' as per the user input.	varchar(255)	Y
12	contact_email_address	Email address of primary contact for the account	varchar(255)	Υ
13	billing_address_line_1	Line 1 of the account Billing address	varchar(255)	Υ
14	billing_address_line_2	Line 2 of the account Billing address	varchar(255)	N
15	city	City of the account Billing address	varchar(255)	Υ
16	state	State/region of the account Billing address	varchar(255)	Υ
17	country	Country of the account Billing address	varchar(255)	Υ
18	postcode	Postal code of the account Billing address	varchar(255)	Υ
19	creation_date	Account creation date (UTC time). YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp	Y
20	account_type	Type of account w.r.t. column #2 i.e. Reseller or Enterprise	varchar(255)	N
21	credit_limit	Credit Limit-One of the Custom Fields at account level	numeric	N
22	user_group_name	Name of user groups associated with the account. This field will carry an array of all assigned user groups with the account. i.e. ["ug1", "ug2", "ug3"], if no user group is assigned then this field will remain blank.	text	Y
23	acc_custom_fields	JSON separated list of all account-level custom fields applied to the account. Contains key-value pairs. This field will be blank if no custom field is defined/assigned. [{"name": "sector", "value": "manufacturing"}, {"name": "region", "value": "Europe"}]	text	Y
24	csp_acc_cf_1	The value stored within the account-level custom field with the name "opcoid" (noncase-sensitive). This column will populate for every ICCID. For example, ckhat.	text	Y
25	groups	JSON List of group-id and names associated with the account. E.g. [{"id": "1", "name": "group1"},{"id": "2", "name": "group2"}]	varchar(255)	N
26	isBillable	Indicates whether the account is billable (True/False)	bool	N

2.5 Ro5 - SIM Additions Report

The **SIM Additions Report** is available to both **CSP and Enterprise** users. It is a report of all SIMs (i.e. subscriptions) which have been activated at the end of previous day. SIM availability in 'ENTERPRISE- INVENTORY' is different from SIM activation. In this report we are capturing the data for SIMs, activated from ENTERPRISE -INVENTORY to 'TRIAL or ACTIVE' (depends on the rate plan).

Table 2-5: Description of SIM Additions Report

#	Field Name	Field Description	Data Type	Mandatory
1.	iccid	ICCID identifying the SIM	varchar(255)	Υ
2.	imsi	IMSI identifying the SIM	varchar(30)	Υ
3.	msisdn	MSISDN number, e.g. 5338250200. See note. This	varchar(30)	N



		field will be populated without '+'		
4.	imei	IMEI of the device associated with the SIM. This field will be blank if the underlying network does not provide this information.	int8	N
5.	wing_account_id	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1. This account ID could be a master account or a sub-account.	int8	Y
6.	wing_account_name	Enterprise account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	Υ
7.	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	varchar(255)	N
8.	wing_master_account_id	WDH Account ID at the 'master- account level' (L1). If account ID in column #5 is a master account, then this field will contain the same information as #5.	int8	Y
9.	wing_master_account_name	Enterprise account name as setup in WDH for the master account.	varchar(255)	Υ
10.	ext_customer_id2	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1. This account ID could be a master account or a sub-account.	varchar(255)	N
11.	account_type	Type of account w.r.t. column #5 i.e. Reseller or Enterprise	varchar(255)	N
12.	sim_status	Current SIM billing status at EOD as per SIM lifecycle. Possible values are as per assigned lifecycle state model.	varchar(255)	Υ
13.	rate_plan_id	ID of rate plan in WING Digital Hub (WDH) assigned to this ICCID at the time of taking this snapshot.	int8	N
14.	rate_plan_name	Rate plan name associated to the ID.	varchar(255)	N
15.	rate_plan_type	Type of rate plan. Possible Values are: Individual, Flex- Pool, Fixed-Pool, Individual Bundle, Flex-Pool Bundle, Fixed-Pool Bundle	varchar(255)	N
16.	subscription_fee	Monthly Recurring Charges of Rate Plan. Read this field in	numeric(21,5)	N



17.	initial_activation_date	reference to 'rateplan_type'. If prepaid then it will hold prepaid_bundle_charge, if individual plan then it will hold sim_mrc and if pool plan then it will hold the sim_mrc. Date / Timestamp (in UTC) the	timestamp(0)	Υ
		ICCID became active (Trail or Active) in the current account. This should be the original activation date (regardless if 10 days or 500 days ago). Activation is when the SIM has begun consuming network resources, regardless of Trail or Active. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52		
18.	status_change_date	Date / Timestamp (in UTC) of the last change captured at the EOD. (When changes from one status to another. Any status change should be updated.). Intermediate changes within the day are not captured. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp(0)	N
19.	apn_group_name	APN Group Name	varchar(255)	N
20.	apn_name	Access point name(s) assigned to the ICCID. If there are multiple APNs assigned, then this field will carry an array of all assigned APNs. E.g. ["wing.iot", "smartmeters.io", "ota.io"], if no apn assigned then this field will be blank.	JSON Array of String	N
21.	ip_address	Static IP Address assigned to the ICCID. Dynamic allocated IP address are not tracked in this field. i.e. ["10.5.23.1", "10.5.55.101"]. if no ip assigned then this field will be blank.	JSON Array of String	N
22.	sim_custom_fields	A JSON array, name-value pairs, of all custom attributes .assigned to this ICCID at the time of taking this snapshot. Example: [{"name": "sector", "value": "manufacturing"}, {"name": "vehicle_no", "value": "MP066609"}]; This field will be blank if no custom field is assigned	JSON	N
23.	csp_acc_cf_1	Value stored within the account-level custom field with name "opcoid" (non-casesensitive). This column will be populated every ICCID. Example: ckhat	varchar(20)	N



24.	rate_plan_version	Version of the rate plan (assigned with the ICCID). This feature is currently under development	int8	N
25.	currency	A 3-letter representation of the currency as per ISO 4217 standard. This value is setup in WDH for the account in column #6. Example: EUR, USD, GBP.	varchar(3)	Υ
26.	group_id	Group_id associated with the SIM	int(8)	N
27.	group_name	Group Name	varchar(255)	N

2.6 Ro6 - MSISDN Pool Overview Report

The **MSISDN Pool Overview Report** is available to **CSP** users only. It reports statistics of all MSISDN pools that belongs to CSP. This is a Snapshot Report (till date data will come in this report)

Table 2-6: Description of MSISDN Pool Overview Report (CSP)

#	Field Name	Field Description	Data Type	Mandatory
1	msisdn_pool_id	Unique id for CSP MSISDN pool	int(8)	Υ
2	msisdn_pool_name	Name of the MSISDN pool	varchar(255)	Υ
3	msisdn_pool_type	MSISDN Pool type (Preload/Shared/Private) Note: Shared and Private will only come if MSISDN is not part of SIM output file.	varchar(255)	Y
4	wing_account_id	WING Digital Hub (WDH) Account ID which owns the MSISDN Pool in column #1. This account ID could be a master account or a sub-account. This information will only come for accounts which have private MSISDN Pools and for the tenant where MSISDNs are not preloaded.	int8	N
5	wing_account_name	Enterprise account name as setup in WDH, e.g. Maria Café Ltd. This information will only come for accounts which have private MSISDN Pools and for the tenant where MSISDNs are not preloaded.	varchar(255)	N
6	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system. This information will only come for accounts which have private MSISDN Pools and for the tenant where MSISDNs are not preloaded.	varchar(255)	N
7	master_account_id	WDH Account ID at the 'master-account level' (L1). If account ID in column #4 is a master account, then this field will contain the same information as #4. This information will only come for accounts which have private MSISDN Pools and for the tenant where MSISDNs are not preloaded.	Int8	N



8	master_account_name	Enterprise account name as setup in	varchar(255)	N
		WDH for the master account.		
		This information will only come for		
		accounts which have private MSISDN		
		Pools and for the tenant where MSISDNs		
		are not preloaded.		
9	ext_customer_id2	External Customer ID associated with	varchar(255)	N
		WDH master account		
		(master_account_id). This is the		
		corresponding customer account number		
		in the CSP's billing system		
		This information will only come for		
		accounts which have private MSISDN		
		Pools and for the tenant where MSISDNs		
40	1. 1. 1	are not preloaded.		
10	recycling_enabled	Indicates whether the MSISDNs in the	bool	Υ
		pool can be recycled (True/False)		
11	quarantine_period	The quarantine duration (in days) before	Int4	N
		an MSISDN can be recycled		
12	pool_count_total	Total number of MSISDNs in the pool	Int4	Υ
13	pool_count_used	Number of MSISDNs currently assigned	Int4	N
		to an IMSI		
14	pool_count_available	Number of MSISDNs not currently	Int4	N
		assigned to an IMSI, which are currently		
		not quarantined		
15	count_quarantined_msisdns	Number of MSISDNs not currently	Int4	N
		assigned to an IMSI, which are currently		
		quarantined		
16	msisdn_pool_state	MSISDN Pool Status	Varchar(255)	Υ
17	csp_acc_cf_1	Value stored within the account-level	Varchar(20)	N
		custom field with name "opcoid" (non-		
		case-sensitive). This column will be		
		populated every ICCID.		
		Example: ckhat		



2.7 Ro7 - User Overview Report

The **User Overview Report** is available to **CSP** users only. It provides the snapshot of the user accounts that can access WING Digital Hub.

Table 2-7: Description of User Overview Report (CSP)

#	Field Name	Field Description	Data Type	Mandatory
1	csp_id	CSP ID	varchar(255)	Υ
2	user_name	Unique username of user	varchar(255)	Υ
3	email_address	Email address of the user	varchar(255)	Υ
4	first_name	First name of the user	varchar(255)	Υ
5	last_name	Last Name of the user	varchar(255)	Υ
6	user_group_name	Name of the group to which the user is part of.	varchar(255)	N
7	user_role_name	Role assigned to the user	varchar(255)	N
8	user_status	Status of the user account (enabled or disabled)	varchar(20)	Υ
9	user_creation_timestamp	Date/time when the user account was created in WDH. YYYY-MM-DDTHH:MM:SS format i.e. 2021-11-11T13:23:52	timestamp(0)	Y
10	user_last_modification_timestamp	Date/time when the user account was last modified in WDH. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp(0)	N
11	user_request_url	Requested URL by user	varchar(255)	N
12	last_login_timestamp	Date/time of the user's last login (latest) to WING at the time of taking this snapshot	timestamp(0)	N
13	last_ip_address	Last known IP Address of the user	varchar(255)	N
14	user_created_by	User who onboarded or created the new user profile in the system	varchar(50)	Υ

2.8 Ro8 - Rate Plan Utilization Report

The **Rate Plan Utilization Report** is available to **CSP** users only. It provides an overview of Rate Plan status, configuration, and subscribers for each plan.

Table 2-8: Description of Rate Plan Utilization Report (CSP)

#	Field Name	Field Description	Data Type	Mandatory
1	rate_plan_id	ID of rate plan in WING Digital Hub (WDH)	int8	Υ
2	rate_plan_name	Rate plan name associated to the ID.	varchar(255)	Υ
3	rate_plan_type	Type of rate plan. Possible Values are: Individual, Flex-Pool, Fixed-Pool, Individual Bundle, Flex-Pool Bundle, Fixed-Pool Bundle	varchar(255)	Y
4	plan_status	Current rate plan status at EOD as per its lifecycle. Possible values are as per assigned lifecycle state model.	varchar(255)	Y
5	plan_start_date	Date when the rate plan was available. YYYY-MM-DD.	Date	N
6	sim_mrc	Not Used	NA	NA
7	pool_mrc	Not Used	NA	NA
8	active_subscriptions	Total number of ICCIDs (across all accounts) subscribed to this rate plan.	int4	N
9	active_accounts	Total number of accounts assigned to this rate plan.	int4	N



10	rate_plan_version	Version of the rate plan (assigned with the	varchar(20)	N
		ICCID). This feature is under development		
		for now.		

Note: 'sim_mrc' and 'pool_mrc' are kept to avoid parsing failure at customer end.

2.9 Ro9 - Pool Usage Report

The **Pool Usage Report** is available to both **CSP and Enterprise** users. It is a daily report generated as per Account Bill Cycle. This report will consist of a month data for an account whose bill cycle is falling on that day hence Daily report will not consist of all the Account information (just like MRR).

Table 2-9: Description of Pool Usage Report

#	Field Name	Field Description	Data Type	Mandatory
1	rate_plan_id	ID of rate plan in WING Digital Hub (WDH)	int8	Υ
2	rate_plan_name	Rate plan name associated to the ID.	varchar(255)	Υ
3	rate_plan_type	Type of rate plan. Possible Values are: Flex-Pool, Fixed-Pool, Flex-Pool Bundle, Fixed-Pool Bundle	varchar(255)	Υ
4	wing_account_id	WING Digital Hub (WDH) Account ID which owns the ICCID in column #4. This account ID could be a master account or a subaccount.	int8	N
5	wing_account_name	Enterprise account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	N
6	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	varchar(255)	N
7	wing_master_account_id	WDH Account ID at the 'master- account level' (L1). If account ID in column #7 is a master account, then this field will contain the same information as #7.	int8	N
8	wing_master_account_name	Enterprise account name as setup in WDH for the master account.	varchar(255)	N
9	ext_customer_id2	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1. This account ID could be a master account or a subaccount.	varchar(255)	N
10	plmn	Plmn in which usage is recorded	varchar(255)	N
11	zone	Zone Name	varchar(255)	N
12	data_usage	Total data usage recorded within the PLMN	int8	N
13	data_charges	Total data charges	numeric(21,2)	N
14	sms_usage	Total sms usage	int8	N
15	sms_charges	Total sms charges	numeric(21,2)	N
16	sms_mo_usage	Total SMS MO usage reported in units	int8	N
17	sms_mo_charges	Total SMS MO Charges	numeric(21,2)	N



18	sms_mt_usage	Total SMS MT usage reported in units	int8	N
19	sms_mt_charges	Total SMS MT Charges	numeric(21,2)	N
20	voice_usage	Total Voice usage reported in minutes (MO+MT)	int8	N
21	voice_charges	Total Voice Charges	numeric(21,2)	N
22	voice_mo_usage	Total Voice MO usage reported in minutes	int8	N
23	voice_mo_charges	Total voice MO Charges	numeric(21,2)	N
24	voice_mt_usage	Total Voice MT usage reported in minutes	int8	N
25	voice_mt_charges	Total Voice MT Charges	numeric(21,2)	N
26	currency	Currency associated with the account	varchar(255)	Υ
27	billing_month	Current bill cycle date for the account. Expressed as YYYY-MM-DD. e.g. 2021-02-01.	date	Y
28	csp_acc_cf_1	Value stored within the account-level custom field with name "opcoid" (non-case-sensitive). This column will be populated every ICCID. Example: ckhat	varchar(20)	N
29	rate_plan_version	Version of the rate plan (assigned with the ICCID). This feature is under development now.	int4	N

2.10 R10 - Solo Plan Usage Report

The **Solo Plan Usage Report** is available to both **CSP and Enterprise** users. It is a daily report generated as per Account Bill Cycle. This report will consist of a month data for an account whose bill cycle is falling on that day hence Daily report will not consist of all the Account information (just like MRR).

Table 2-10: Description of Solo Plan Usage Report

#	Field Name	Field Description	Data Type	Mandatory
1	rate_plan_id	ID of rate plan in WING Digital Hub (WDH)	int8	Υ
2	rate_plan_name	Rate plan name associated to the ID.	varchar(255)	Υ
3	rate_plan_type	Type of rate plan. Possible Values are: Individual, Individual Bundle.	varchar(255)	Υ
4	iccid	ICCID identifying the SIM	varchar(255)	N
5	imsi	IMSI identifying the SIM	varchar(30)	N
6	msisdn	MSISDN identifying the SIM	varchar(30)	N
7	wing_account_id	WING Digital Hub (WDH) Account ID which owns the ICCID in column #4. This account ID could be a master account or a subaccount.	int8	N
8	wing_account_name	Enterprise account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	N
9	ext_customer_id1	External Customer ID associated with WDH account (wing_account_id). Generally, the value in this field maps to the corresponding customer account	varchar(255)	N



		number in the CSP's billing		
		system.		
10	wing_master_account_id	WDH Account ID at the 'master- account level' (L1). If account ID in column #7 is a master account, then this field will contain the same information as #7.	int8	N
11	wing_master_account_name	Enterprise account name as setup in WDH for the master account.	varchar(255)	N
12	ext_customer_id2	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1. This account ID could be a master account or a subaccount.	varchar(255)	N
13	plmn	Plmn in which usage is recorded	varchar(255)	N
14	zone	Zone Name	varchar(255)	N
15	data_usage	Total data usage recorded within the PLMN	int8	N
16	data_charges	Total data charges	numeric(21,2)	N
17	sms_usage	Total sms usage	int8	N
18	sms_charges	Total sms charges	numeric(21,2)	N
19	sms_mo_usage	Total SMS MO usage reported in units	int8	N
20	sms_mo_charges	Total SMS MO Charges	numeric(21,2)	N
21	sms_mt_usage	Total SMS MT usage reported in units	int8	N
22	sms_mt_charges	Total SMS MT Charges	numeric(21,2)	N
23	voice_usage	Total Voice usage reported in minutes (MO+MT)	int8	N
24	voice_charges	Total Voice Charges	numeric(21,2)	N
25	voice_mo_usage	Total Voice MO usage reported in minutes	int8	N
26	voice_mo_charges	Total voice MO Charges	numeric(21,2)	N
27	voice_mt_usage	Total Voice MT usage reported in minutes	int8	N
28	voice_mt_charges	Total Voice MT Charges	numeric(21,2)	N
29	currency	Currency associated with the account	varchar(255)	Υ
30	billing_month	Current bill cycle date for the account. Expressed as YYYY-MM-DD. e.g. 2021-02-01.	date	Y
31	csp_acc_cf_1	Value stored within the account- level custom field with name "opcoid" (non-case-sensitive). This column will be populated every ICCID. Example: ckhat	varchar(20)	N
32	rate_plan_version	Version of the rate plan (assigned with the ICCID). This feature is under development.	int4	N
33	total_charge	Total charge for ICCID – SUM (voice_mo_charges, voice_mt_charges, sms_mo_charges, sms_mt_charges and data_charges	numeric(21,2)	N



2.11 R11 - API Usage Report

The API Usage Report is available to CSP users only.

Note: This report captures GUI as well as API usage details.

Table 2-11: Description of API Usage Report (CSP)

#	Field Name	Field Description	Data Type	Mandatory
1	tenant_id	WDH CSP Id	varchar(255)	Υ
2	user_id	API or UI User Id, who initiated the request	varchar(255)	Υ
3	request_source_ip	Origination IP address of the request	varchar(255)	Υ
4	request_source_name	Origination Source Name	varchar(20)	Υ
5	request_type	Type of Request	varchar(20)	Υ
6	requested_resource	Source of the request	varchar(20)	Υ
7	request_timestamp	Data & Time of the request initiation. YYYY-MM-DDTHH:mm:ss format i.e. 2021-11-11T13:23:52	timestamp(0)	Υ
8	account_id	wing account ID on which the user is performing the action. Note: The value of this field is * if the action is for all accounts.	int8	Υ
9	user_name	API- or UI-user who triggered the request	varchar(255)	Υ

2.12 Rated CDR Report

The **Rated CDR Report** is available to CSP users only. This report captures format of the rated CDR generated by WING Digital Hub. Rated CDRs will be transferred by SFTP on a daily basis.

This document captures format of the rated CDR generated by WING Digital Hub.

2.12.1 Background

The rated CDR report in WING Digital Hub takes its data from the rating service, which generally takes the approach that only session terminate records are rated (not all of the intermediate update requests), meaning that the full usage for a session which last multiple days will be reported on the day the session terminates. However, if this approach is used universally, it can have an impact on billing - when a session terminates in a different bill period from the one in which it was started, or worst effect when the majority of the usage within one bill period and only the termination is outside the bill period.

For this reason, at the end of the bill period (minimum 24 hours), update records are also processed by rating. This allows us to bill up to the last update request within the bill period so that the usage is predominantly billed in the correct bill period. (There will always be a small delta between the usage at the point of the last update request within the bill period and 23:59 on the last day of the bill period, but this is deemed acceptable to be billed in the next bill period.) Only usage since the last processed update request of the bill period and the session termination will be reported and billed in the next bill period (i.e. the usage which has already been charged will not be double-counted).

2.12.2 Looking at Different Scenarios

Some basic scenarios, simplified to look only at key fields and also in one table, not in separate daily reports, to confirm behaviour of the platform and associated data in the report are shown below. Aligned to the above, rated CDR reports for the majority of the month will only have records for terminated sessions (column 38 will only show terminate_request as a value). For the last day of the month, the report will also contain update_requests in addition to terminate_requests. The value of the usage reported in the volume_consumed column is defined in such a way that there is no duplication in the reporting of usage for either scenario.

For the majority of the month, volume_consumed represents the volume_consumed in the whole session, reported in the terminate_request. This usage could have been on that calendar day (row 2), or it could be spread across multiple calendar days (row1), but it will only be seen on the day the session is terminated.



On the last day(s) of the month, update_requests will also be processed and the last update of the calendar day will be recorded in the report. The event_subtype column being populated with update_request indicates that the session is still ongoing at the end of that calendar day. In this case, the volume_consumed represents the usage up to the point of the last update request of the day (row 4).

When that session is finally terminated, the record will appear in the rated CDR report and the volume_consumed will represent the usage since the previously reported update record – it does NOT represent the full usage for the terminated session (row 5).

Row #	event_id	event_timestamp	charging_id	start_time_stamp	event_subtype	volume_consumed	final_usage (really cumulative usage)
1	273	25-Jan	V	23-Jan	terminate_request	58 MB	58 MB
2	419	28-Jan	W	28-Jan	terminate_request	17 MB	17 MB
3	543	30-Jan	Х	30-jan	update_request	100 MB	100 MB
4	1250	31-Jan	Х	30-jan	update_request	50 MB	150 MB
5	2596	01-Feb	Х	30-jan	terminate_request	75 MB	255 MB

2.12.3 Definition

Table 2-12: Description of Rated CDR Report

#	Field Name	Field Description	Data Type	Mandatory
1	event_id	Unique ID for every call. Auto generated as a 16-digit numeric value	int8	Y
2	account_id	WING account ID to which the ICCID is assigned.	int8	Υ
3	wing_account_name	WING account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	Y
4	external_customer_id1	External Customer ID associated with WDH account. This is usually the corresponding customer account number in the CSP's billing system	varchar(255)	N
5	master_account_id	Account ID of the master account under which the subaccount is found. Same as account_id when account_id is a master account.	int8	Y
6	master_account_name	Enterprise account name as setup in WDH for the master account. If the account is a master account, this will be the same as #3. If the account is a subaccount, this will be the master account under which the account is found.	varchar(255)	Y
7	external_customer_id2	External Customer ID associated with WDH master account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	varchar(255)	N
8	currency	Currency configured for the account	varchar(255)	N
9	csp_acc_cf_1	CSP-level custom field at account level to be used to identify the OpCo.	text	N
10	apn	Access Point Name used to consume network resources within this record. This field will be empty for Voice and SMS records.	varchar(255)	N
11	band_label_id	ID which references the band applied to this record. A 'band' is a combination of originating zone and destination zone as defined in the rate plan assigned	int8	N



		to this ICCID. For data calls, this field refers to the originating zone.		
12	current_state	Current SIM LC state - this will indicate TRIAL or ACTIVE.	varchar(255)	N
13	iccid	ICCID which will incur the charge. (The MO IMSI in MO event, MT IMSI in MT event).	varchar(255)	Υ
14	imsi	IMSI which will incur the charge. (The MO IMSI in MO event, MT IMSI in MT event).	varchar(30)	Υ
15	msisdn	MSISDN which will incur the charge. (The MO IMSI in MO event, MT IMSI in MT event).	varchar(30)	N
16	calling_msisdn	MSISDN of the calling party. This field will be populated for voice, data, and MO-SMS.	int8	N
17	called_msisdn	MSISDN of the called party. This field will be empty for Data calls.	int8	N
18	event_type	Indicates the call type for this record. Valid values are: MO-Voice, MT-Voice, MO-SMS, MT-SMS, Data Session.	varchar(255)	Υ
19	tadig	TADIG code identifying the network which provided service for this record.	varchar(255)	N
20	event_time_stamp	Timestamp. Indicates the time when this record was processed (i.e. rated) by the rating engine.	timestamp	Y
21	bill_period	The billing cycle in which this CDR will be reflected, YYYY-MM.	varchar(255)	Υ
22	duration	Duration of the call expressed in seconds, not rounded.	int8	N
23	ip_address	IP address used by the device. Applicable only for data calls and where available.	varchar(255)	N
24	rate_plan_id	ID of the rate plan related to this record. Numeric data type. This is a unique number within a given deployment of WDH.	int8	N
25	rating_group_id	Rating group (if any) applied to this record.	int8	N
26	start_time_stamp	Timestamp. Indicates the start time of the call event.	timestamp	N
27	subscription_id	ID of the subscription related to this record. Numeric data type. This is a unique number within a given deployment of WDH.	int8	Y
28	tenant_id	ID of the tenant. Identifies the tenant to which the ICCID within this record belongs to.	varchar(255)	Y
29	timeslot_id	Reference to the group of time slots within the rate plan assigned to the ICCID in this record.	int8	N
30	tentative_charge	The fee (or charge) that has been computed as per the rate plan for the volume consumed in this record as maximum charge, depending on the service used.	numeric(21,2)	N
31	volume_consumed	Data volume expressed in bytes- Not populated for voice calls.	int8	N
		For sessions which both start and are terminated between the first and the penultimate day of the bill period, there will be only one entry per session. the volume_consumed represents the full volume consumed in this session (charging_id) which could be split over multiple days.		
	022 — Elaktra HI D for Paparts	For sessions which span bill periods, volume_consumed shows the volume of data		© Nokia



		consumed in this session (charging_id) on the particular calendar day. It does not include usage for that session consumed on another day i.e. it does not represent cumulative usage for that session. This is true both for the row for event_subtype = terminate_request and event_subtype = update request. See clarifying example for details.		
32	data_usage_uplink	Data volume expressed in bytes, where available.	int8	N
33	data_usage_downlink	Data volume expressed in bytes, where available.	int8	N
34	rate_plan_name	Name of rate plan related to this record.	varchar(255)	N
35	group_id	Group_id associated with the SIM	int4	N
36	group_name	Group Name	varchar(255)	N
37	charging_id	Unique identifier of a particular data session.	varchar(255)	N
38	event_subtype	Populated only for data sessions. Possible values: update_request; terminate_request Where the value is update_request, this means the session is on-going at the end of the calendar day at the end of the bill period.	varchar(30)	N

2.13 Daily Data Usage Report

The **Daily Data Usage Report** is available to both **CSP and Enterprise** users. It is a daily report containing total data usage for a Subscriber (ICCID) on that calendar day.

Note:

- For Daily SMS usage use Rated CDR report and aggregate the SMS CDR's per ICCID.
- For Daily voice usage As voice calls usually do not last more than a few hours, it is expected that Rated CDR will
 also provide a view of daily voice usage, however the Enterprise would need to aggregate the CDR's within that
 report for this view. Only if a voice call is extended over midnight, it would not appear in that day's Rated CDR
 report.

Table 2-13: Description of Daily Data Usage Report

#	Field Name	Field Description	Data Type	Mandatory
1	iccid	ICCID identifying the SIM	varchar(255)	Y
2	imsi	IMSI ICCID identifying the SIM	varchar(30)	Υ
3	msisdn	MSISDN number, e.g. 5338250200. This field will be populated without '+'.	varchar(30)	N
4	account_id	WING Digital Hub (WDH) Account ID which owns the ICCID in column #1. This account ID could be a master account or a sub-account.	int8	Y
5	wing_account_name	WING account name as setup in WDH, e.g. Maria Café Ltd.	varchar(255)	Y
6	external_customer_id1	External Customer ID associated with WDH account. This is usually the corresponding customer account number in the CSP's billing system	varchar(255)	N
7	master_account_id	Account ID of the master account under which the subaccount is found. Same as account_id when account_id is a master account.	int8	Y
8	master_account_name	Enterprise account name as setup in WDH for the master account. If the account is a master account, this will be the same as #3. If the account is a	varchar(255)	Y



		subaccount, this will be the master account under which the account is found.		
9	external_customer_id2	External Customer ID associated with WDH master account (wing_account_id). Generally, the value in this field maps to the corresponding customer account number in the CSP's billing system.	varchar(255)	N
10	csp_acc_cf_1	CSP-level custom field at account level to be used to identify the OpCo.	text	N
11	tenant_id	ID of the tenant. Identifies the tenant to which the ICCID within this record belongs to.	varchar(30)	Υ
12	group_id	Group_id associated with the SIM	varchar(255)	N
13	group_name	Group Name	int8	N
14	data_usage	Volume of data consumed on the particular calendar day.	numeric(21,2)	Υ
15	data_usage_uplink	Data volume expressed in bytes.	int8	Υ
16	data_usage_downlink	Data volume expressed in bytes.	int8	Υ
17	last_request_timestamp	Timestamp for the last request for the day	int8	Υ

3 Interface Definition

3.1 File Naming Format

The following naming convention shall be applied for all reports listed in table below:

<ReportTitle>_[YYYY]-[MM]-[DD]-[hh][mm][ss]_<csp-id>.txt.gz.pgp

Where:

YYYY is the year in four-digit notation;

MM is the month in two-digit notation (01 - 12);

DD is the day in two-digit notation (01 - 31).

hh is the two-digit hour of the day (UTC time)

mm is the two-digit minute of the hour

ss is the two digit second of the minute

ReportTitle is the title of the report as per the table below.

CSP-ID is an identifier unique to CKH. Value is "_ckh".

Note: for Austria csp-id will be ckhat

For Italy it will be 'windtrelab'

For Ireland – ckh3ie (TBD)

Report Title	Full Report Name
subscriber_delta_report	Subscriber Delta Report
sim_inventory_report	SIM Inventory Report
subscriber_status_report	Subscriber Status Report
account_snapshot_report	Account Snapshot Report
sim_additions_report	SIM Additions Report
msisdnpool_overview_report	MSISDN Pool Overview Report
user_overview_report	User Overview Report
rateplan_utilization_report	Rateplan Utilization Report
pool_usage_report	Pool Usage Report
solo_plan_usage_report	Solo Plan Usage Report
api_usage_report	API Usage Report

Example: user_overview_report_2021-08-26-115900_ckhat.txt



The above naming complies to both CKH requirements:

- (A) Model 1 and 3: Report filenames will be segregated at Level 2 CSP level.
- (B) Model 2: Report filenames will not be segregated to identify the Operator

3.2 File Format & Transfer Procedure

Name	Description
File format	Gzipped pipe delimited text file
Field Separator	Pipe
File Security	PGP Encryption
File Transfer Protocol	Secure FTP
FTP Roles	CKH IOD is the 'Client', WING AWS SFTP endpoint hosts the 'Server'
Push or Pull	CKH IOD pulls files from the AWS SFTP endpoint.
Path for Home Directory	<to advised="" aws="" be="" by="" team="" wing=""></to>
Time window for transfer	Transfers will be initiated between <hh:mm> and <hh:mm> UTC on the day of transfer</hh:mm></hh:mm>



A.1 Glossary & Definitions

Relevant terms and abbreviations are defined below:

Abbreviation	Description
ICCID	Integrated Circuit Card Identification Number representing a SIM card. It is a unique 18 - 22 digit code that
	includes a SIM card's country, home network, and identification number. Each SIM card has a globally
	unique ICCID.
IMEI	International Mobile Station Equipment Identity. A unique 15-digit serial number that represents the
	mobile device / handset.
IMSI	International Mobile Subscriber Identity. It is a mobile subscriber's unique identification number within the
	network.
CSP	Cellular Service Provider.
MSISDN	Mobile Station International Subscriber Directory Number. It is a number that uniquely identifies a
	subscription in a mobile network. This is commonly known as a user's mobile number.
PLMN	Public Land Mobile Network. Any terrestrial wireless communications system.
SIM	Subscriber Identity Module.