



System Interface Document

PROS



**PROS
Group Revenue Management System**

08 February 2018

PROS GRMS 6 - System Interface Description

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Change History

VERSION	DATE	PERSON	REASON FOR CHANGE
Draft	20 Jul 2005	Sanjay Datta	First draft
1.0	22 Jul 2005	Carlos Hinke	Standard formatting for discussions with SITA
1.1	15 Aug 2005	Carlos Hinke	Add request loader format description per Sanjay Datta
1.2	14 Sep 2005	Tse Lee	Change the CCITIN and PnrGen interface formats. Modify the PnrLoad and Request Load XML format
	16 Sep 2005	Tse Lee	Add the reference load (IATA, CityPos, ...) schema and examples
	19 Sep 2005	Tse Lee	Negotiation module documentation. Also correct the RequestLoad example
	20 Sep 2005	Tse Lee	Acceptance Module document and correct PnrGen PRO field
	21 Sep 2005	Tse Lee	Confirmation/Rejection document
	28 Sep 2005	Tse Lee	Confirmation/Rejection document and change the font style
	29 Sep 2005	Tse Lee	Add DirNum, RangeNum, and SegNum to the request load file
	30 Sep 2005	Tse Lee	Correct Office code example
	3 Oct 2005	Tse Lee	Correct > Fare and Special fare errors
	4 Oct 2005	Tse Lee	Correct impDate extra space from the Market Fare table
	13 Oct 2005	Tse Lee	Add the SubOptID for the break-up option for the negotiation module
	14 Oct 2005	Tse Lee	Modify the PnrGen return message Element from "Reply" to "Response"
	21 Oct 2005	Tse Lee	Add Market Matrix table for the reference load. Add the CCITIN response error.
	24 Oct 2005	Tse Lee	Add the Data Editor for the reference loader
	25 Oct 2005	Tse Lee	Add the Internet Communication Protocol for the loading file convention
	26 Oct 2005	Tse Lee	Modify reference table key types fro the number format.
1.3	28 Oct 2005	Tse Lee	Change the format of the SID
	29 Oct 2005	Tse Lee	Modify the layout of System Out content
	31 Oct 2005	Tse Lee	Add the Confirmation/Rejection information
1.4	1 Nov 2005	Tse Lee	Create the version on the CCITIN and PNRGEN request
	3 Nov 2005	Tse Lee	Modify the IATA as optional field
1.5	9 Nov 2005	Tse Lee	Add the preferred date in the request direction as optional field
	10 Nov 2005	Tse Lee	Add the Office Code in the schema and example of the PnrGen request
	30 Nov 2005	Tse Lee	Correct the 3.5.2.2.2.5 parentCode, 3.5.2.2.6 response tag, and CCITIN response example. Provide the descending nested order example for the classes display. PNRGen response data fields provide.
1.6	12 Dec 2005	Tse Lee	Provide the Segment portion of CCITIN for one carrier (3.5.2.2.8) Adding Parent class code and city point of sale. Modify the primary key definition of the market fare table.
1.7	16 Dec 2005	Tse Lee	Add the two fields (MinSeatRqstd, Negoflag) on the Request load mainly for the negotiation module
	16 Dec 2005	Tse Lee	Update all the examples such that if there any optional field without any value, G6 will not send this attribute out. Also update all the data fields with explanations on all the optional fields.
	19 DEC 2005	Tse Lee	Correct the MinSeatRqstd to be optional. Negoflag values will be valid only from 0, 1, 2, 3, and 4.
1.8	19 DEC 2005	Tse Lee	Add the Office Code to the PnrLoad 3.3.2.2
	20 Dec 2005	Tse Lee	Change the PNRGen response 3.5.3.2 errMsg from required to optional. Remove the character definition on ".
	21 Dec 2005	Tse Lee	Change the errMsg in CCITIN from required to optional.

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1.9	28 Dec 2005	Tse Lee	Negotiation input 3.4.1.2 Add the additional message on the confirm and rejection response
	10 Jan 2006	Tse Lee	3.4.1.1 Add Trip Duration to the directional information of the Negotiation module. Remove the segment information from the negotiation module. That segment information was designed for segment control carriers for the pricing inquiry purpose.
	20 Jan 2006	Tse Lee	Change the Note type to Char04 as requested by Carlos.
1.10	6 Feb 2006	Tse Lee	Add one additional column Country POS in the reference City POS table
1.11	7 Feb 2006	Tse Lee	3.3.2.3 Acceptance interface creation. Change the OptionID and SubOptionID as integer representation although the type is still char04. Change the Quoted Fare to be optional in the RequestLoad as requested by Carlos.
1.12	10 Feb 2006	Tse Lee	Change the Acceptance loader SID format. Direction and option level information are separated. Change the accepted fare as optional. StaleFalg information is still under design. Correct the entire RequesDate format to be YYYYMMDD in the Request load, Negotiation, and Acceptance.
	14 Feb 2006	Tse Lee	Change the Option ID to the number type on the Negotiation and Acceptance modules.
	28 Feb 2006	Tse Lee	Add the special note for the PnrLocator type based on the request from one carrier. That carrier has old G52 PNRLocator loading format. It contains unnecessary spaces. G6 will trim those spaces if necessary.
	2 Mar 2006	Tse Lee	3.3.2.1 Make the City POS and District POS as required fields in the Ad Hoc Request Load.
1.13	2 Mar 2006	Tse Lee	Series Request SID draft creation on the Data fields
	6 Mar 2006	Tse Lee	Add the negotiation file naming and acceptance naming at the file description 4.2.3
	14 Mar 2006	Tse Lee	Add the Kebut three fields in the Series request header
	21 Mar 2006	Tse Lee	Provide the schema and example for the Series module. Correct some spelling errors.
	22 Mar 2006	Tse Lee	Provide the schema for the Kebut Request
	23 Mar 2006	Tse Lee	Change 3.4.1.2. Change the three optional fields of Loc as Series only
	24 Mar 2006	Tse Lee	3.5.3.1 Change the NoteType and Value attribute name of <PRO> to noteType and value. The CCITIN and PNRGen schema are generated by using the Relax NG tool.
	27 Mar 2006	Tse Lee	Change the Note from the Series Request level to the Pattern level.
	28 Mar 2006	Tse Lee	Add the description of the optional fields
	28 Mar 2006	Tse Lee	Correct the Series Segment comment
	31 Mar 2006	Tse Lee	Correct the "accepted delete" mark on the SID
	11 Apr 2006	Tse Lee	Provide the primary key constrain for the Series Loader
	12 Apr 2006	Tse Lee	Correct Series fare information SFI example error
1.14	21 Apr 2006	Tse Lee	Add the exchange rate on the PnrGen PRM record
	1 May 2006	Tse Lee	Remove red color reminder from the document
1.15	2 May 2006	Sanjay Datta	Add Seg AU in the Ccitin Reply Segment Class Section for CITP.
1.16	2 May 2006	Tse Lee	Change the NestedAU of the Segmentss of CCITIN response as optional Add the schema and example for the nestAU for CITP CCITIN response Add the Exchange Rate table.
1.17	15 May 2006	Tse Lee	Change the fare (quoted fare, local fare, and marginal fare) from NUM 08 to NUM 10. Add the local fare in the PNR Loader SID interface.
	17 May 2006	Tse Lee	Correct the example of Trip Duration. It does not apply to direction 1.
	17 May 2006	Tse Lee	Correct the Adhoc XSD syntax errors.

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	17 May 2006	Tse Lee	Change the NUM02 – NUM10 type definition from maxLength to totalDigits Change NUM05 and NUM08 type from unsignedShort to UnsignedInt Change NUM10 to unsignedLong
	22 May 2006	Tse Lee	Correct the Adhoc example MinSeatsRqst to MinSeatRqst Chane the Adhoc Schema Remove the empty element from the Adhoc example.
	23 May 2006	Tse Lee	Change the XSD PreferredFlightFlag and PnrGenFlag
	24 May 2006	Tse Lee	Change the PNRLocator and PrimPnrLocator to be optional in the RHP of Ad Hoc request loader.
	30 May 2006	Tse Lee	Correct the SDT missing DptNum in the example Correct the misspelling on the PreferredFalg in the Series Loader example
	31 May 2006	Tse Lee	Add the Num01Type as the reference type Correct CCITIN response example on the Flight Leg closing tag Correct CCITIN response schema Option tag Correct CCITIN response schema leg compartmnt data type Correct CCITIN response schema departureDate spelling
1.18	1 June 2006	Tse Lee	Origin, Destination, and Class on the Series Segment (SFP). ProcessId is for the Kebut ID communication on SDT. ProcessId added for the Confirmation
1.19	1 June 2006	Tse Lee	Add the optional attribute notAvalable in the flight element of CCITIN response. Change the CCITIN response file attributes. Specify the required attributes for the necessary fields. Correct CCITIN response schema error.
	2 June 2006	Tse Lee	PNRGen request example correction on the <Request> closing tag. Add the use = "required to the PNRGen Respopse schema
	6 June 2006	Tse Lee	Fix the exchange rate example error
	7 June 2006	Tse Lee	Fix the Series Loader example group type S
	9 June 2006	Tse Lee	Change the CCITIN Reply schema Change the Air Craft String to be option under the CCITIN Response Leg
	12 June 2006	Tse Lee	Use the Relax NG to generate the PNRGen response file
1.20	27 June 2006	Tse Lee	Add the nonControlFlag to the CCITIN flight response Modify the ccitin response xsd
	05 July 2006	Tse Lee	Add the comment on the Series Loader Seggment. The Class Code is reserved for the kebut proccess.
	28 June 2006	Tse Lee	Correct the description of the PNR local fare
1.21	2 Aug 2006	Tse Lee	3.4.1.1 HFO record add FlightInfo and ConnectionCities Add HFF record to the negotiation
1.22	6 Aug 2006	Tse Lee	3.3.2.4 1. Move the GroupShell ID and PNRLocator from the header level. 2. Add the GroupShell ID and PNRLocator on the departure level
	10 Aug 2006	Tse Lee	3.4.1.1 Change the Fligh IN comment and change the connection cities attribute as optional
1.23	10 Aug 2006	Tse Lee	3.4.1.2 Add the Group Shell ID on the confirmation file for Kebut request 3.3.2.4 remove the GroupShell ID from the series departure level.
1.24	21 Aug 2006	Tse Lee	3.3..2.4 Add the finished flag for the Kebut request termination indicator. 3.3.2.4 Remove GroupShellID and PnrLocator from the XSD
1.25	8 Sep 2006	Tse Lee	Reference table Peak/Off-Peak design
1.26	21 Sep 2006	Tse Lee	Remove the Finished from the Series Header.
	25 Sep 2006	Tse Lee	Provide the schema for the Peak/Off Peak reference loader

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	2 Oct 2006	Tse Lee	3.5.3.1 change the PNRGEN district POS as optional
	2 Oct 2006	Tse Lee	3.5.3.1 modify the schema for district POS
	4 Oct 2006	Tse Lee	3.5.3.1 modify the schema and description of cityPOS as optional
	6 Oct 2006	Tse Lee	Change the pLoadPeak to pLoadPOP and file extension file to POP
	13 Oct 2006	Tse Lee	3.3.2.1 Add the comment for the PNR request on the preferred flight information
	17 Oct 2006	Tse Lee	3.3.2.1 Add the comment for the RFS. It is mandatory for the PNR Request.
	04 Dec 2006	Tse Lee	Relax the restrictions of unique Note Type. The loading note can have multiple note type.
	08 Jan 2007	Tse Lee	Fix the xsd schema for the Acceptance Load. The note type is unbounded. Also, fix the Negotiation xsd for the Note type and other attributes
	10 Jan 2007	Tse Lee	Add the Char04, Char11, Char26 type and correct the Negotiation example
	11 Jan 2007	Tse Lee	Change the Confirmation schema and example
1.27.1	11 Jan 2007	Tse Lee	Introduce the airlineVenderID in the CCITIN and PNEGEN request Change the schema of CCITIN and PNRGen
	19 Jan 2007	Tse Lee	Add the CCITIN error message in the schema and change the PNRGen error message size to 50
	31 Jan 2007	Tse Lee	Provide the reference to the web service specification
	5 Feb 2007	Tse Lee	Remove the carrier specific referenc in the change history.
	7 Mar 2007	Tse Lee	Correct the number type NUM02 inconsistency in the request file
	8 Mar 2007	Tse Lee	Add the comments on the leading spaces of the loading data
	9 Mar 2007	Tse Lee	Add the NUM04 type to the basic type. Correct the basic type definitions.
	12 Mar 2007	Tse Lee	Change the market fare table search type to Flag01 for consistency. Change special fare table compartment code to Char 02 Change the flag type to flag 01 type on the schema for most of the flags on the request header. Change the request type flag from flag 01 to flag Add Char256 type for the note text Add Char05Type for the country POS type Change the PNRLoad market destination data type to CityType Change cancellation flag and outbound flag to flag 01 for the pneload. Change the note type size to 256 for all the notes Change the flge type to flag 01 type for Series Header data (partial confirm, preferred flag...) Change the negotiation on the option selected flag to Num01 Rewrite the Series Loader schema.
	13 Mar 2007	Tse Lee	Add additional comments on the flight number regarding the 5 digits.
	14 Mar 2007	Tse Lee	Remove the city type minimum 3 characters restriction. Change district type to country type
	22 Mar 2007	Tse Lee	Remove the additional comment from the range number on Ad Hoc Request Change the
1.27.2	22 Mar 2007	Tse Lee	Add two additional attributes on the 3.5.3.1 PNRGen for the GHI feature.
	27 Mar 2007	Tse Lee	Remove the control characters from the SID. Correct the confirmation note values to value Correct the XSD of confirmation and rejection Remove maxOccurs="1" for the optional element Remove the comment " or pass a balnk value..." Remove Time06 Use the new XSD for the PNRLoad. Correct the PNRLoad example

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	27 Mar 2007	Tse Lee	Remove the schemalocation from the XSD
	28 Mar 2007	Tse Lee	Add the recordset description for Ahdoc., Acceptance, Series, PNRGen, and PNR loader.
	29 Mar 2007	Tse Lee	CCITIN and PNRGen request XSD type addition. Correct the orientation to Symbol02Type even G6 sends out only one character Change the NUM XSD to handle the +/- sign of values.
	2 April 2007	Tse Lee	Correct the Symbol description maximum from 1 to 2.
	19 April 2007	Tse Lee	Add the comment for the CCITIN day offset response.
	24 April 2007	Tse Lee	Add the comment on the nestedAU of the CCITIN segment class.
	26 April 2007	Tse Lee	Add the note for the Time Limits example on the PNRGen note
	27 April 2007	Tse Lee	Change the PreferredFlightFlag to PreferredFlag on the SHG schema of the Series loader
	3 May 2007	Tse Lee	Remove the transactional data schemas from SID. Rename the time limits to name firming.
	4 May 2007	Tse Lee	Change the name firming PRO type to NFM
	23 May 2007	Tse Lee	Change the comment of the accepted fare in the negotiation.
	7 June 2007	Tse Lee	Remove the reference schema from the SID
	12 June 2007	Tse Lee	Change the Program Name from required to optional
	1 Aug 2007	Tse Lee	Add the comment to the PMG and constraint to match the XSD as required
	2 Aug 2007	Jay Goldberg	Modified Agency table. Added Traffic Area and Region tables and dataloader information. Added Country POS dataloader.
	6 Aug 2007	Tse Lee	Modify the AU and Segment limit constraint on the Segment Class of CCITIn response
	12 Sep 2007	Tse Lee	Change the quoted fare as optional in the Series Loader design
	13 Sep 2007	Tse Lee	Add the comment for the CustType in the PNRLoad for the non-existing value. Pass 0. Add the comment for the acceptance not regarding the duplicate notes.
	28 Nov 2007	Tse Lee	Change the title Internet Communication Protocol to the Interface Communication protocol.
	29 Nov 2007	Tse Lee	Add the comment on the PNR rejection system. The group shell id will be 0 in this case.
1.27.3	12 Dec 2007	Tse Lee	Add the realFare and localFare for the PNR level on the PNRGen request 3.5.3.
1.27.4	31 Jan 2008	Tse Lee	Add the deal code and term tables Add the AOL fare reference Add the deal indicator and trip type on the Ad Hoc header Add the stop over indicator and stop over cost on the Ad Hoc direction
	8 Feb 2008	Tse Lee	Change OAL pos definition as class POS and change the size to char 10
1.27.5	8 Feb 2008	Tse Lee	Add the Deal message to the Series Loader on the header and direction level
	13 Feb 2008	Tse Lee	Change the Stop over cost to NUM10 on the Terms (confirmation/rejection)
	13 Feb 2008	Tse Lee	Change the Term data field from locator to id.
	14 Feb 2008	Tse Lee	Change the Deal type to identity and add back the deal type
1.27.6	20 Feb 2008	Tse Lee	Change the OAL table description according to a new design
	22 Feb 2008	Tse Lee	Change the example for the OAL fare. Change the carrier, compartment, class type definitions.
	25 Feb 2008	Tse Lee	Change the Deal Indicator as Char 02 in the request header and series header
	29 Feb 2008	Tse Lee	Change the terms on the reply file. Put capital character on the first letter of element name.
1.28.0	11 Mar 2008	Tse Lee	Series loader changes (SetNum and SeasonIndicator) for the ORW module.
	14 Mar 2008	Tse Lee	Change the start date as required in the OAL table

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	17 Mar 2008	Tse Lee	Provide the comment on the optional End Date on the OAL table.
	25 Mar 2008	Tse Lee	Force the OAL table to have the carrier code values.
	26 Mar 2008	Tse Lee	Correct the start date and end date definition for travel departure date range
	28 Mar 2008	Tse Lee	Correct PRM description. It is one per group shell
	8 Apr 2008	Tse Lee	Add the exchange rate formula on the exchange rate table
	13 May 2008	Tse Lee	Add the comment on the trip duration
	20 May 2008	Tse Lee	Add the comment to the CCITIN noControlFlag response file
1.29.0	30 May 2008	Tse Lee	Add additional field percent_name as optional on the gx_country_pos
	10 June 2008	Tse Lee	Modify the PNRLoad input file and make the group type as optional
	30 June 2008	Tse Lee	Add one additional field Preferred Option for the negotiation file
	03 July 2008	Jay Goldberg	Add CRS to request header and pnrGen request. Add reject_flag to pnrGen response.
	17 July 2008	Tse Lee	Expand the User iD to character length 128 in the PNRGen request file
1.30.0	08 Aug 2008	Tse Lee	Add the Program name to the Negotiation file
	25 Aug 2008	Tse Lee	Add the comment on the PNRLoad day offset value to include O&D
	27 Aug 2008	Jay Goldberg	Add AgentURL to AdHoc and Series Loaders
	30 Nov 2008	Tse Lee	Remove the transaction description on 4.2.2
	15 Dec 2008	Tse Lee	Correct the 3.3.1.11.2 comment
	22 Jan 2009	Tse Lee	Correct PMG comment for the Group Type of PNRLoad
1.31.0	11 Feb 2009	Tse Lee	Add Segment NestedAvailability fields in the class level Add allowAvailability in the segment compartment level
	26 Feb 2009	Tse Lee	Add another type for the Open Jaw for the trip type.
	5 Mar 2009	Tse Lee	Correct the comment update date
	2 Apr 2009	Tse Lee	Update the PNRLoad LCU and Local fare information
	21 Apr 2009	Tse Lee	Correct CCITIN request Flight element (destination and date). Correct CCITIN response Option to optional if there is any error. CCITIN response segment compartment and class elements are required.
1.32.0	12 May 2009	Tse Lee	Add market matrix date range table Add market fare adjustment table
	29 June 2009	Tse Lee	Add 3.5 for the Reservation Migration content
	16 July 2009	Jay Goldberg	Enhancing OAL Fare loader
1.33.0	21 July 2009	Tse Lee	Add the oalAvailability at the leg compartment
	23 July 2009	Cecil Ureña	New columns in the Market Fare table.
	23 July 2009	Tse Lee	Attditional comment on the Market fare DepartStartTime, DepartEndTime, Frequency, PaxHi, and are added PaxLo Change the frequency type description. Add the comment for PaxLo and PaxHi.
1.34.0	04 August 2009	Javid Jamae Jay Goldberg	Fixed typos Moved the Deal element inside of the PNR element for PNRGen Request and made it support arbitrary deal items defined by keys/value pairs. Moved DealIndicatorFlag and TripType from the Series Request Load SHG record to the SPG record (from series to pattern level). Deprecated the confirmation/rejection message and created a new confirmation/rejection message structure that supports terms and conditions at the pattern level for series rather than supporting a single terms and conditions structure for an entire series. Confirmation/rejection messages now support arbitrary terms and conditions items defined by key/value pairs.
1.35.0	13 August 2009	Cecil Ureña	Created section for Deposit Deadline loader. Added dataloader file examples.

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1.36.0	18 August 2009	Hector Villarreal	Created section for Name firming Deadline loader. Added dataloader file examples.
	9 September 2009	Cecil Urefia	Modified deposit deadline section Fixed wording of Booking From and Booking To columns.
	10 September 2009	Tse Lee	Remove the SID version back to 1.36.0 since there is no schema change.
	5 October 2009	Tse Lee	Remove the rule process reference for the PNR Loader and Ad Hoc Request Loader post proceee. Modify the PMG note on the PNR Loader for any Group Shell created outside G6
	12 October 2009	Tse Lee	Change the Exchange Rate loader from Insert to Insert/Update in the document 3.3.1.12
1.37.0	13 October 2009	Tse Lee	Add the Local fare on the negotiation 3.4.1.1
1.38.0	20 October 2009	Tse Lee	Change Frequency field from optional to required 3.3.1.7 Market Fare table Change Frequency field from optional to required 3.3.1.17 OAL Fare table Change TripOrigin field from optional to required 3.3.1.17 OAL Fare table Change TripDestination field from optional to required 3.3.1.17 OAL Fare table Change StartTime field from optional to required 3.3.1.17 OAL Fare table Change PaxMin field from optional to required 3.3.1.17 OAL Fare table
	27 October 2009	Tse Lee	Change comment on the 1.38.0 Change OAL example
	20 January 2010	Tse Lee	Add comments on the request header for ApExclusive field in section 3.3.2.1.2.1 Add the default value for this field.
	20 January 2010	Tse Lee	Change the OAIL fare task name and file extention
	8 March 2010	Tse Lee	Additional comment on the loading date of PNR Loader 3.3.2
	15 March 2010	Tse Lee	Additional comment on the PrimaryPNRLocator of Ad Hoc Rerquest Loader 3.3.2.1
1.39.0	5 April 2010	Jay Goldberg	Added Ancillary Revenue and Via for Market Fare
	16 April 2010	Tse Lee	Modify the Ancillary Revenue name from CHAR size 256 to 24 under 3.3.1.7. Change the Via from Char 05 to City Change the Order of Via
1.40.0	19 April 2010	Tse Lee	Add the Ancillary Revenue on PNR generation interface 3.5.3.1
1.41.0	17 May 2010	Tse Lee	Ancillaryrevenue element added in 3.3.2.2.2.2 for PNR data loader
	15 November 2010	Tse Lee	MinSeatRqstd comment provided shoule be greater than 0 on section 3.3.2.1.2.1
	11Jan2011	Jay Goldberg	Change deal value length to 1024.
1.42.0	12 Jan 2011	Tse Lee	Schema changes on the PNR Genration request from size 256 to 1024 on section 3.5.3.1.2.6.
	25 Jan 2011	Tse Lee	3.3.1.11 AdjPercentage comment correction
1.43.0	16 March 2011	Tse Lee	3.4.1.1.2.4 ClsCode and ClassPOS added on the negotiation module
1.44.0	16 March 2011	Tse Lee	3.3.2.3.2.3.1 Add a new block AFF for the acceptance module
	21 March 2011	Tse Lee	Correct the HFF description from HHF to HFF
	21 March 2011	Tse Lee	Update HFF example on the new ClassCode field
1.45.0	30 March 2011	Tse Lee	3.3.2.3.2.3.1 Modify the AFF with the latest design
1.46.0	6 April 2011	Tse Lee	Update negotiation flightInfo size from char 26 to char 128
1.47.0	29 April 2011	Tse Lee	3.5.2.2.2.2 Add one additional arrivalDate on the CCITIN flight response.
1.48.0	2 May 2011	Tse Lee	3.3.2.2.2.2 Add the outstation to the PMG
1.49.0	17 August 2011	Tse Lee	3.3.2.4.2.5 Relax the <SFP> as a required constraint
1.50.0	2 September 2011	Tse Lee	3.5.4 PNR Refresh interface
1.50.0	19 September 2011	Jay Goldberg	Add Discount Percent to City POS loader
1.51.0	20 September 2011	Tse Lee	Correct the version number sicne Schema has changed

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1.52.0	26 September 2011	Jay Goldberg	Add Discount Percent to AdHoc and Series loaders
1.53.0	3 October 2011	Tse Lee	3.5.3.1.2.1 Add the adjustedRealFare on the PNR Level.
1.54.0	3 October 2011	Tse Lee	3.5.2.2.2.4 Add the groupBooked on the CCITIN response Leg Compartment
1.55.0	19 October 2011	Jay Golderg	Remove Discount Percent from City POS Loader and add a City POS Discount Loader
1.56.0	28 November 2011	Sonny Tran	Add an optional Local Fare to Acceptance loader and require/optional clarifications to the comments. The new local fare is added to the Option recordSet: HFO
1.57.0	16 January 2012	Tse Lee	3.4.1.1.2.3 Add ArrDayOffset
	18 January 2012	Tse Lee	Move the ArrDayOffset position
	1 February 2012	Tse Lee	Make the classCode optional on the negotiation
1.58.0	25 April 2012	Tse Lee	Add the Marketing Flight Fare loading table
	28 June 2012	Tse Lee	Remove the CityPOs and DisPos comment for getting value from Agency table for the Ad Hoc and Series Request
1.59.0	10 September 2012	Tse Lee	Add a new flight capacity control data loader
	11 September 2012	Tse Lee	Add the reference data tag for flight group capacity control
	17 September 2012	Tse Lee	Put the key information to the flight group capacity table for the compartment
	20 September 2012	Tse Lee	Change some should wording
1.60.0	23 October 2012	Tse Lee	Add RestOfWorld on the Market Fare Origin table
	24 Oct 2012	Tse Lee	Provide comment for Rest of World flag
	29 October 2012	Tse Lee	Modify the Rest of World flag indicator comment
1.61.0	19 November 2012	Sonny Tran	Add keyAccount field to PNRGen Request in RecordSet Group
1.62.0	17 April 2013	Tse Lee	Add a new Reject Request loader
	23 April 2013	Tse Lee	Enhance the reject loader general description
	24 April 2013	Tse Lee	Minor change on the reject loader description
	23 May 2013	Tse Lee	Comment on the 10-digit fare
1.63.0	11 September 2013	Jay Goldberg	Added optional Compartment Code to HFO holding file record set
1.64.0	24 November 2013	Brent Franklin	Added adjustedCapacity to CCITIN Leg Compartment Added totalAU to CCITIN Leg Compartment Added Bid Price to CCITIN Leg Compartment Added Aircraft Configuration List to CCITIN Leg Added Inventory Map to CCITIN Leg
1.65.0	27 November 2013	Brent Franklin	Added odAvailability to CCITIN Segment Class
1.66.0	20 December 2013	Brent Franklin	Added Bid Price index in CCITIN Leg Compartment
1.67.0	24 January 2014	Brent Franklin	Added EFT to CCITIN Option Added EFT to CCITIN Flight Added Marketing Carrier Code and Marketing Flight number to CCITIN Flight Added Aircraft Type to CCITIN Flight
1.67.1	29 January 2014	Naresh Pakalapati	Added optional fields Carrier Code and Flight Number to MFG market fare data
1.68.0	05 February 2014	Brent Franklin	Added Country POS to CCITIN Request
1.69.0	25 March 2014	Sonny Tran	Added optional field SetNum to RFS record in Request Loader and setNumber in Ccitin request under prefer flight data
1.69.0	25 March 2014	Sonny Tran	Added rqstID to CCITIN Request
1.69.0	25 March 2014	Sonny Tran	Added fcsDmdLF to CCITIN Leg Compartment
1.70.0	15 July 2014	Naresh Pakalapati	Change the terms on the series reply file. Moved terms and conditions from pattern level to locator level.

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1.71.0	6 Aug 2014	Jay Gooldberg	Added fields to the CCITIN request direction: direction_informative, origin_informative, destination_informative, compartment, via, OALonly
1.72.0	9 Aug 2014	Mac McEacham	Added allowOAL and directFlightsOnly to the request direction
1.73.0	11 Aug 2014	Brent Franklin	Added groupCapacityPercent to CCITIN Leg Compartment response
1.74.0	08 Feb 2018	Chenna Maduru	Added IMPLEMENT_DATE and DEACTIVATE_DATE to Speicia fare

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1. Overview

Scope

The PROS Group 6 revenue Management System is an airline revenue management system which allows airlines to control and perform an economic evaluation of a group passenger request. This document, the System Interface Document (System SID) describes the various inputs used to transact with the PROS Group 6 Revenue Management System. This data is required to support the evaluation, confirmation and post acceptance maintenance. Note that this document identifies tables and data required at the time of installation. Other tables and data files may be required during various phases of this project and they will be identified by the SRD and SID of those components as and when they are required.

Purpose

This initial draft is a part of the initial discussion regarding the use of the Web Services technology for the communication between G6 Web Based Application and RES interface.

Please note that this is only a draft and some of the items may change as we go into detail requirements.

The purpose of this document is to provide an idea on the type of data that would be passed between RES and the PROS Group 6 revenue Management System using the Web Services with the standard HTTP protocol. The data exchange format will follow the XML schema format that is described in this document.

The PROS Group 6 SID provides:

- General Format Requirements
- The Purpose of Each Record (where necessary)
- The Required Order Within Each Group of Related Records
- The Definition of Each Data Element (where necessary)

This document serves as the primary reference for the interfaces to PROS Group 6 Revenue Management System. In addition, the PROS Revenue Management staff will be available to work closely with the project teams during various stages of implementation. Some of the support functions performed by PROS staff on site include:

- Assisting clients in installing codes and any patches or upgrades as they arise
- Configure environment, and setting up production and test environments
- Setup System Parameter Tables
- Data Loading and Testing
- Data Analysis
- Monitor Loading Process

The Airline is responsible for providing the required data from their own data sources or from a third party. This includes building any data extraction programs needed to extract from the Airline or from third party sources and formatting the data in the exact manner required by the PROS Group 6 Revenue Management System. The Airline is also responsible for validating, accuracy and completeness of the data prior to transmitting the data to the PROS Group 6 System.

System Context

2. Interface Load Formats

Interface Load Formats

- All data will be composed of ASCII characters.
- The following are valid formats for nullable fields:
 - <TAG></TAG> (no spaces between the start and end tag)
 - <TAG/>
 - Do not include the tag at all if it is an optional field
- Blank lines will be ignored.
- All file formats must comply the rules and standards of the Extensible Markup Language (XML) 1.0 set forth by document REC-xml-19980210. This document specifies a syntax created by subsetting an existing, widely used international text-processing standard (Standard Generalized Markup Language, ISO 8879:1986I as amended and corrected) for use on the World Wide Web. Please see <http://www.w3c.org>.
- All files must begin with the following Root Header:
- <?xml version="1.0" ?>
- Every file consists of one Dataset, containing one or more Record sets with identical schema structure.
- Each dataset is constructed of a Dataset Header, Record sets and Dataset Footer
- Each Record set is constructed of a Record set Header, Data Fields and Record set Footer.
- Each dataset must have a pair that consists of a Dataset Header and a Dataset Footer. The Dataset Header must be the first record of the dataset. The Dataset Footer must be identical to the Header with a slash (/) between the leading bracket and the name, as shown:
- <DatasetName> - Dataset Header
- </DatasetName> - Dataset Footer
- The Dataset Footer must be the last record in the dataset.
- Each record set must have a Record set Header and Record set Footer. The Record set Header must be the first record of the record set. The Record set Footer must be identical to the Header with a slash (/) between the leading bracket and the name, as shown:
- <RecordsetName> - Record set Header
- </RecordsetName> - Record set Footer
- The Record set Footer must be the last record in the record set.
- Each field must be presented on a new record and must have a Start-Tag before and an End-Tag after the value. The End-Tag must contain a name that echoes the field's name as given in the Start-Tag, preceded by a slash (/), e.g.
<FieldName>Value</ FieldName>
- No quotation should be used for the values.
- Trailing spaces will be truncated during the load.
- Leading spaces will not be considered a valid input and must be avoid. E.g.
<FieldName> Value</ FieldName> must be avoided. The correct input must be
<FieldName>Value</ FieldName>.

Example 1:

```
<?xml version="1.0" ?>
<DatasetName>
<RecordsetName>
<FieldName1>FieldValueA11</FieldName1>
    <FieldName2>FieldValueA12</FieldName2>
```

```

...
</RecordsetName>
<RecordsetName>
<FieldName1>FieldValueA21</FieldName1>
  <FieldName2>FieldValueA22</FieldName2>
...
</RecordsetName>
</DatasetName>

```

Processing/Data Rules

2.1.1 Required

This indicates whether a specific field is required in the input records (Y = Yes, N = No). An empty field that is required will result in an error message in the log file and the record will be rejected. An empty field that is not required will result in a Null value in the database record.

Providing only spaces in a required field will result in an error during the load. The spaces will be truncated, as described above, resulting in a null field value.

2.1.2 Referential

A field that is validated using referential data requires a corresponding record to be inserted in the lookup table prior to inserting the record. For example, to insert a record in the Terminal table there must first be a record in the Region table that can be referenced.

A record will be rejected without corresponding referential fields and an error will be written to the log file.

2.1.3 Validity Check

A field with a data type validity check will be checked against that data type. A field with a range will be checked to fall within that range. If either of these checks fails, when required, the record will be rejected without corresponding referential fields and an error will be written to the log file.

2.1.3.1 Pre-defined

Values from a pre-defined list: these will be listed within the applicable section.

2.1.3.2 Letters

A-Z and a-z only

2.1.3.3 Numbers

0-9 only

2.1.3.4 Alpha

A-Z, a-z, 0-9, and the space character

2.1.3.5 ASCII

Freeform text field allowing all ASCII values, except for the following reserved characters:

```

ASCII code 34 - "
ASCII code 35 - #
ASCII code 37 - %
ASCII code 38 - &

```


ASCII code 39 - ‘
ASCII code 43 - +
ASCII code 60 - <
ASCII code 61 - =
ASCII code 62 - >

2.1.3.6 Decimal [a, b]

a = number of places to left of decimal

b = number of places to right of decimal

2.1.3.7 Character (CHAR)

The CHAR fields may include any ASCII printable character except double quote (") (ASCII 34).

2.1.3.8 Number (NUM)

The NUM fields may only use the following characters: '0' through '9', '+' and '-' (ASCII 48 through 57, 43 and 45). The '+' character is redundant since all numeric values are assumed to be positive unless prefixed with the '-' character. Leading zeros are not required.

Note: NUM 01 means the valid number is in the range 0-9.

NUM 02 means the valid number is in the range 0-99.

NUM 03 means the valid number to be in the range 0 – 999.

NUM 10 means the valid number to be in the range 0 – 2147483647.

For the NUM 02 or NUM 03, G6 expects the actual numeric number value. For example, 01 will not be valid for NUM 02. The actual number must be 1 instead. The NUM definition is for the reference. However, the Group System can take the number more than the defined range.

2.1.3.9 Date (DATE)

The DATE field consists of eight characters between '0' and '9' (ASCII 48 through 57). The format is YYYYMMDD, where YYYY is the year, MM is the month (01 for January), and DD is the date.

Note: The DATE format is 8 digits to be year 2000 compliant.

2.1.3.10 Time (Time04)

A TIME field consists of four numeric characters between '0' and '9' (ASCII 48 through 57) that will be interpreted as hours and minutes, HHMM. The valid range is 0000 (midnight) to 2359 (one minute before midnight). Leading zeros need not be provided.

2.1.3.11 Flag (FLAG)

A FLAG field consists of '0' (ASCII 48) or '1' (ASCII 49) in each position and are interpreted as:

- 0 Interpreted as OFF, NO, FALSE
- 1 Interpreted as ON, YES, TRUE

2.1.3.12 Symbol

The SYMBOL field type is the same as CHAR field type with a maximum length of two (2) characters. It is used for identifying Airline's booking class and aircraft compartments.

2.1.3.13 Carrier

The *CARRIER* field is the same as the CHAR field type with a maximum length of three (3) characters. This field contains carrier codes.

2.1.3.14 Flight

The *FLIGHT* field type is the same as the CHAR field type with a maximum length of five (5) characters. This field contains flight numbers. This field may contain non-numeric characters. G6 will send flight number with 5 digits when communicating to the outside world (O&D, CCITIN, PNRGen...). I.e. flight 1, flight 01, flight 001, and flight 0001 will all be converted to flight 00001. PROS encourages all the interfaces with flight number coming to G6 be in the form of 5 digits. G6 will pad with zeros to the flight number and make it 5 digits if necessary. The interface (CCITIN request, PNRGen request, Negotiation...) receiving the flight number from G6 may need to be aware the flight format to avoid any potential conflict.

2.1.3.15 City

The *CITY* field type is the same as the CHAR field type with a maximum length of five (5) characters. This field contains City or Airport codes.

2.1.3.16 Country

The *Country* is same the as CHAR field type with a minimum length of two (2) characters and a maximum length of three (3) character.

2.1.3.17 Frequency

The *FREQUENCY* field is the same as a series of FLAG fields with a maximum length of seven (7) FLAGS. *FREQUENCY* is used to identify the days of week over which an activity takes place (flight operation). This field must be coded as a series of seven (7) FLAGS with no intervening blanks. The first flag is for Monday, the last flag for Sunday. For example, if a flight operates Monday through Friday but not on Saturday and Sunday must be coded as 1111100. A flight operating on Saturday and Sunday must be coded as 0000011.

2.1.3.18 Locator

The *Locator* field type is the same as the CHAR field type with a maximum length of twenty-one (21) characters. The PNR Locator in the Group System is different from the Reservation System's (RES) PNR locator, which usually has 6 characters. The PNR locator in the PROS Group System contains both the RES PNR locator **AND** creation date, and has the following format: "PNRLocYYYYMMDD". For example, if the PNR is created on May 30, 2000 and the RES' PNR locator is "AAAAAA", the PNR locator for PROS Group System is "AAAAAA20000530".

IMPORTANT NOTE: Some Airlines may require 2 Locators for designate a PNR: a RES locator and a GDS locator. The Group System will support this condition. The new format could have any one of the 3 options:

- "RESSTR/GDSSTRYYYYMMDD" or
- "RESSTRYYYYMMDD" or
- "/GDSSTRYYYYMMDD"

If a carrier doesn't use the GDS locator then use RESSTRYYYYMMDD (same as "PNRLocYYYYMMDD" format outlined in the description above).

PROS Group System will trim unnecessary spaces in the Locator input.

Example:

Case 1:

"H005T/Y9E9VI20060917" will have RES Locator "H005T" with five characters only.

The space before "/" will be removed in this example.

Case 2:

"HLQ4K / 20061220" will have RES Locator "HLQ4K". GDS Locator will not be generated.

"HLQ4K / 20061220" will have the same result as "HLQ4K20061220" when loading into PROS Group System.

2.1.3.19 Defined Types

The content of schema can be found at /config/interface/xsd/type.xsd file.

2.1.3.20 Validity Checks during Batch Loading

All validity checks indicated in this document are fully enforced when entering or modifying data through the PROFIT user interface. For performance reasons however, certain validity checks are necessarily relaxed during batch loads. The following rules apply during batch load processing:

- All general "alpha" or "letters" validity checks are replaced with an Oracle character type validity check, which allows any ASCII character. This rule does not apply in cases where only a specific letter range is allowed.
- All general "decimal" or "numbers" validity checks are replaced with an Oracle number validity check. This rule does not apply in cases where only a specific number range is allowed.

2.1.4 Processing Rules

Processing rules describe any modification to the data required upon loading.

2.1.5 Data Loader Behavior

A description of Loader configuration for updates, inserts, and delete/truncates is included here. The following modes of operation are supported:

2.1.5.1.1 Update, Insert

The Update/Insert mode of the data loader uses the idiom of first trying to update a row of data in the database; if the update fails (new record) then the row is inserted. This method is useful for two reasons:

- (a) Most of the data to be loaded is updates of the existing data, which will improve performance.
- (b) The data is reference data for other tables, thus deleting a row would cause other data to be deleted.
- (c) The existing data in the table is to be maintained.

2.1.5.1.2 Insert, Update

The Insert/Update mode of the data loader uses the idiom of first trying to insert a row of data in the database; if the insert fails (existing record) then the row is updated. This method is useful for two reasons:

- (a) Most of the data to be loaded is inserts, which will improve performance.
- (b) The data is reference data for other tables, thus deleting a row would cause other data to be deleted.
- (c) The existing data in the table is to be maintained.

2.1.5.1.3 Delete, Insert

The Delete/Insert mode of the data loader uses the idiom of first deleting the row of data, then inserting the row of data. This mode can be used when:

- (a) performance can be improved.
- (b) no relationships exist that depend on the data.

2.1.5.1.4 Truncate, Insert

The Truncate/Insert mode of the data loader uses the idiom of first truncating the entire table, then inserting the data from the file. The mode can be used when:

- (a) performance can be improved
- (b) no relationships exist that depend on the data
- (c) the existing data can be deleted without consequences.

3. Interface Definitions

Terminology

Dataset	A dataset contains a sequence of records. Rules are applied to the processing of records sequenced in a dataset.
Record Header	A record header is a keyword identifier that marks the beginning sequence of stream of subrecords and/or data fields.
Root Header	A root header is the first record of a file. It is the following tag: <code><?xml version="1.0" ?></code>
Dataset Header	A dataset header is a tag, which is the first record in the dataset. It states the dataset name: <code><DatasetName></code>
Dataset Footer	A dataset footer is the last record in the dataset. It is a tag with the dataset name, preceded by a slash: <code></DatasetName></code>
Record set Header	A record set header is a tag, which is the first record in the record set. It states the record set name: <code><RecordsetName></code>
Record set Footer	A record set footer is the last record in the record set. It is a tag with the record set name, preceded by a slash: <code></RecordsetName></code>
Sub-record	A sub-record is a logical grouping of data fields separated by delimiters. A record may contain one or more sub-record types. A sub-record begins with a sub-record header followed by the data fields. Rules are applied to the processing of the data fields.
Data Field	A data field contains the raw input data, which may be characterized by data type and syntax. Rules are applied to the processing of the raw data fields.
Start-Tag	The beginning of every Data Field is marked by a Start-Tag: <code><FieldName></code>
End-Tag	The end of every Data Field that begins with a start-tag must be marked by an End-Tag containing a single slash and a name that echoes the field name as given in the start-tag: <code></FieldName></code>
Field Value	The text between the start-tag and the end-tag is called the field's value. That value will be loaded into the PROFIT database. The table name corresponds to the DatasetName and column name is the FieldName.
Level <i>n</i> record	Records may be "nested" more than two levels deep. In such cases, the record definitions will have a label indicating the hierarchy. The top level will be a "Level 1 record", and any

labeled "Level 2 record" will be subordinate (a subrecord) to the last preceding "Level 1 record" (etc., for "Level 3 record").

Special Requirements

None

System Inputs

3.1.1 Reference Data

The user will load the following datasets whenever any of the data has changed. Load date and time can be different for each data set. If a new data dependent set (say terminal) which depends on another data set (say supply point) is to be loaded, then the load order must respect the dependence.

	Dataset Name	RecordSet Name	Record Description
1	CityPosData	PSC	City Point of Sale
2	DistPosData	PSD	District Point of Sale
3	MktOrgnDstn	MOD	Market Origin Destination
4	AgencyData	AGG	Agency information
5	CustomerData	NCT	Customer Type Information
6	MarketData	MOG	Market Origin Information
7	MarketFareData	MFG	Market Fare Information
8	SpecialFareData	MFS	Promotional Fare Information
9	MarketMatrixData	MMG	Weekend Definition in Market Information
10	ExchangeRateData	EXR	Exchange Rate
11	PeakData	MKT	Peak /Off-peak period data information
12	TrafficArea	TAD	Traffic Area Information
13	Region	RGD	Region Information
14	Country	CTD	Country POS Information
15	OALFareData	FVI	OAL fare information
16	DepositDeadlineData	DDL	Deposit deadline information
17	MktFltFareData	MFF	Marketing Flight Fare information
18	NameFirmingDeadline Data	NFD	Name Firming Deadline Data
19	CityPosDiscountData	PSD	City POS discount
20	FlightCapacityData	FCG	Flight Group Capacity Control

3.1.1.1 City POS

3.1.1.1.1 Description

The city code for cities that are handled group requests.

3.1.1.1.2 Data Fields

	Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
1	CityPos	CITY	Y			Y	IAH	City Point of Sale
2	Description	CHAR 30	N			N	HOUSTON	Name of the city
3	Country POS	CHAR 05	N			N	US	Country Point of Sale.

3.1.1.1.3 Processing Rules

None.

3.1.1.1.4 Loader Behavior

Insert/Update

3.1.1.1.5 Schema

The content of schema can be found at /config/interface/xsd/citypos.xsd file.

3.1.1.1.6 Example

```
<?xml version="1.0"?>
<CityPosData>
  <PSC>
    <CityPos>IAH</CityPos>
    <Description>HOUSTON</Description>
  </PSC>
  <PSC>
    <CityPos>LAX</CityPos>
    <Description>Los Angeles</Description>
    <CountryPos>US</CountryPos>
  </PSC>
</CityPosData>
```

3.1.1.2 City POS Discount

3.1.1.2.1 Description

The extra discount that may be applied based on City POS and a date range.

3.1.1.2.2 Data Fields

	Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
1	CityPos	CITY	Y			Y	IAH	City Point of Sale
2	EffDate	DATE	Y			Y	20060101	This field contains the date starting from which the discount is valid Format: YYYYMMDD

	Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
3	DisContDate	DATE	Y			N	200600331	This field contains the last departure date the discount is valid. Format: YYYYMMDD
4	DiscountPercent	NUMBER 03	Y			N	15	Discount percentage

3.1.1.2.1 Loader Behavior

Insert/Update

3.1.1.2.2 Schema

The content of schema can be found at /config/interface/xsd/cityposdiscount.xsd file.

3.1.1.2.3 Example

```
<?xml version="1.0"?>
<CityPosDiscountData>
  <PSD>
    <CityPos>IAH</CityPos>
    <EffDate>20060101</EffDate>
    <DisContDate>20060131</DisContDate>
    <DiscountPercent>10</DiscountPercent>
  </PSD>
  <PSD>
    <CityPos>LAX</CityPos>
    <EffDate>20060102</EffDate>
    <DisContDate>20060131</DisContDate>
    <DiscountPercent>15</DiscountPercent>
  </PSD>
</CityPosDiscountData>
```

3.1.1.1 District POS

3.1.1.1.1 Description

The district code table for countries that have group requests.

3.1.1.1.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DistPos	CITY	Y		Alpha	Y	IAH	District Point of Sale
Description	CHAR 30	N		ASCII	N	HOUSTON	Name of the district. Don't pass this field if there is no value.

3.1.1.1.3 Processing Rules

None

3.1.1.1.4 Loader Behavior

Insert/Update

3.1.1.1.5 Schema

The content of schema can be found at /config/interface/xsd/distpos.xsd file.

3.1.1.1.6 Example

```
<?xml version="1.0"?>
<DistPosData>
  <PSD>
    <DistPos>IAH</DistPos>
    <Description>HOUSTON</Description>
  </PSD>
</DistPosData>
```

3.1.1.2 Market O&D

3.1.1.2.1 Description

The market origin and destination defaults to the first direction origin and destination of the group's travel itinerary. PROS Group System uses this information as tracking criteria for group behavior.

3.1.1.2.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MktODkey	NUM 05	Y			Y	1	Market O&D key number determined by the client
Orgn	CITY	Y			N	JFK	Name of the origin city for this market
Dstn	CITY	Y			N	LHR	Name of the destination city for this market
Description	CHAR 30	N			N		Text. Don't pass this field if there is no value.

3.1.1.2.3 Processing Rules

None

3.1.1.2.4 Loader Behavior

Insert/Update

3.1.1.2.5 Schema

The content of schema can be found at /config/interface/xsd/mktod.xsd file.

3.1.1.2.6 Example

```
<?xml version="1.0"?>
<MktOrgnDstn>
  <MOD>
    <MktODkey>1</MktODkey>
    <Orgn>JFK</Orgn>
    <Dstn>LHR</Dstn>
    <Description>test</Description>
  </MOD>
</MktOrgnDstn>
```

3.1.1.3 Agency Information

3.1.1.3.1 Description

Travel agency information table for agencies that have business with Airlines.

3.1.1.3.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
IATA	CHAR 10	N			N	A987654321	IATA. It is not mandatory. However, either IATA or Office Code must exist.
Agency	CHAR 50	Y			N	Work Travel Agency	Agency name
OfficeCode	CHAR 10	N			N	HOU0034	Office Code
City	CITY	Y			N	HOU	City Point of Sale
KeyAccount	CHAR 06	N			N		Key Account. The contact person information of this IATA. Don't pass this field if there is no value.
Department	CHAR 05	N			N	EYG	Internal Department Identification

3.1.1.3.3 Processing Rules

None

3.1.1.3.4 Loader Behavior

Insert/Update

3.1.1.3.5 Schema

The content of schema can be found at /config/interface/xsd/agency.xsd file.

3.1.1.3.6 Example

```
<?xml version="1.0"?>
<AgencyData>
  <AGG>
    <IATA>A987654321</IATA>
    <Agency>Work Travel Agency</Agency>
    <OfficeCode>HOU0034</OfficeCode>
    <City>HOU</City>
    <KeyAccount>test</KeyAccount>
    <Department>EYG</Department>
  </AGG>
</AgencyData>
```

3.1.1.4 Customer Type

3.1.1.4.1 Description

Customer type is the characteristic of the group. Airline identifies and standardizes the Customer type categories.

3.1.1.4.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Key	NUM 10	Y			Y	1	Customer key identifier
Description	CHAR 30	Y			N	LUXURY	Customer description

3.1.1.4.3 Processing Rules

None

3.1.1.4.4 Loader Behavior

Insert/Update

3.1.1.4.5 Schema

The content of schema can be found at /config/interface/xsd/custtype.xsd file.

3.1.1.4.6 Example

```
<?xml version="1.0"?>
<CustomerData>
  <NCT>
    <Key>1</Key>
    <Description>LUXURY</Description>
  </NCT>
  <NCT>
    <Key>2</Key>
    <Description>SPORT</Description>
  </NCT>
</CustomerData>
```

3.1.1.5 Market Fare Origin

3.1.1.5.1 Description

Market fare reflects the ideal going rate ranges for each specified direction of travel in a particular market.

3.1.1.5.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
City	CITY	Y			Y	JFK	City name of Market
MarketID	NUM 03	Y			N	1	Market ID
RestOfWorld	FLAG 01	N			N	0	Rest of world flag. It is designed to indicate this specific City and Market ID can use the Rest Of World market ID if the regular market fare retrieval is failed. 1: This City and MarketID can use the rest of world market ID if the regular market fare retrieval failed. 0: This City and MarketID can not use the rest of world marketID

3.1.1.5.3 Processing Rules

None

3.1.1.5.4 Loader Behavior

Insert/Update

3.1.1.5.5 Schema

The content of schema also can be found at /config/interface/xsd/mktorg.xsd file.

3.1.1.5.6 Example

```
<?xml version="1.0"?>
<MarketData>
  <MOG>
    <City>JFK</City>
    <MarketID>1</MarketID>
    <RestOfWorld>0</RestOfWorld>
```

</MOG>

<MOG>

<City>DEL</City>

<MarketID>2</MarketID>

<RestOfWorld>1</RestOfWorld>

</MOG>

</MarketData>

3.1.1.6 Market Fare

3.1.1.6.1 Description

PROS Group System uses the market fare information as an additional source for group user during evaluation.

3.1.1.6.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MarketID	NUM 03	Y			Y	1	Market ID
TravelOrgn	CITY	Y			Y	JFK	Travel Origin City
TravelDestn	CITY	Y			Y	LHR	Travel Destination City
SearchFlag	FLAG 01	Y			Y	0	0 = Travel Date Only 1 = Travel Date and Sales Date
EffectDate	DATE	Y			Y	20000501	Effective Date
DiscontDate	DATE	Y			N	20001231	Discontinue Date
ImplDate	DATE	Y			Y	20010515	Implementation Date
DeactDate	DATE	Y			N	20010630	Deactivation Date
Compartment	CHAR 02	Y			N	Y	Compartment Code
MidWeekLowFare	NUM 10	Y			N	250	Midweek Low Fare
MidWeekGoingFare	NUM 10	Y			N	350	Midweek Going Fare
MidWeekAverageFare	NUM 10	Y			N	300	Midweek Average Fare
WeekendLowFare	NUM 10	Y		Integer	N	255	Weekend Low Fare
WeekendGoingFare	NUM 10	Y		Integer	N	355	Weekend Going Fare
WeekendAverageFare	NUM 10	Y		Integer	N	305	Weekend Average Fare
DepartStartTime	CHAR 04	N		String	N	0400	Departure Start Time in 24 hr Format
DepartEndTime	CHAR 04	N		String	N	0400	Departure End Time in 24 hr Format
CrrCode	CHAR 03	N		String	N	ZZ	Carrier Code
FlightNum	CHAR 05	N		String	N	00729	Flight Number
Frequency	FLAG 07	Y		String	Y	0000001	7-character frequency
PaxHi	NUM 04	N		Integer	N	10	High seat requested number
PaxLo	NUM 04	N		Integer	N	10	Low seat requested number

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Via	CITY	Y		String	Y	FRA	Travel Via Point Asterisk (*) means any via point.
<AR>		N					Ancillary Revenues Do not pass this field if the value is NULL.

3.1.1.6.3 Ancillary Revenue (AR)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Name	CHAR 24	Y			Y	YQ	Name of Ancillary Revenue
Amount	NUM 10	Y			N	100	Amount of Ancillary Revenue

3.1.1.6.4 Processing Rules

None

3.1.1.6.5 Loader Behavior

Insert/Update

3.1.1.6.6 Schema

The content of schema can be found at /config/interface/xsd/mktfare.xsd file.

3.1.1.6.7 Example

```

<?xml version="1.0"?>
<MarketFareData>
  <MFG>
    <MarketID>1</MarketID>
    <TravelOrgn>JFK</TravelOrgn>
    <TravelDestn>LHR</TravelDestn>
    <SearchFlag>0</SearchFlag>
    <EffectDate>20000501</EffectDate>
    <DiscontDate>20001231</DiscontDate>
    <ImplDate>20010515</ImplDate>
    <DeactDate>20010630</DeactDate>
    <Compartment>Y</Compartment>
    <MidWeekLowFare>250</MidWeekLowFare>
    <MidWeekGoingFare>350</MidWeekGoingFare>
    <MidWeekAverageFare>300</MidWeekAverageFare>
    <WeekendLowFare>255</WeekendLowFare>
    <WeekendGoingFare>355</WeekendGoingFare>
    <WeekendAverageFare>305</WeekendAverageFare>
    <DepartStartTime>0300</DepartStartTime>
    <DepartEndTime>0600</DepartEndTime>
    <Frequency>0000001</Frequency>
    <CrrCode>ZZ</CrrCode>
    <FlightNum>729</FlightNum>
    <PaxHi>25</PaxHi>
    <PaxLo>15</PaxLo>
    <Via>*</Via>
  <AR>
    <Name>YQ</Name>

```

```

        <Amount>45</Amount>
    </AR>
    <AR>
        <Name>YR</Name>
        <Amount>458</Amount>
    </AR>
    <AR>
        <Name>XF</Name>
        <Amount>8</Amount>
    </AR>
</MFG>
<MFG>
    <MarketID>2</MarketID>
    <TravelOrgn>LHR</TravelOrgn>
    <TravelDestn>DEL</TravelDestn>
    <SearchFlag>0</SearchFlag>
    <EffectDate>20000501</EffectDate>
    <DiscontDate>20001231</DiscontDate>
    <ImplDate>20010515</ImplDate>
    <DeactDate>20010630</DeactDate>
    <Compartment>Y</Compartment>
    <MidWeekLowFare>250</MidWeekLowFare>
    <MidWeekGoingFare>350</MidWeekGoingFare>
    <MidWeekAverageFare>300</MidWeekAverageFare>
    <WeekendLowFare>255</WeekendLowFare>
    <WeekendGoingFare>355</WeekendGoingFare>
    <WeekendAverageFare>305</WeekendAverageFare>
    <DepartStartTime>0500</DepartStartTime>
    <DepartEndTime>0800</DepartEndTime>
    <Frequency>0000010</Frequency>
    <PaxHi>23</PaxHi>
    <PaxLo>18</PaxLo>
    <Via>*</Via>
    <AR>
        <Name>YQ</Name>
        <Amount>450</Amount>
    </AR>
    <AR>
        <Name>YR</Name>
        <Amount>4580</Amount>
    </AR>
</MFG>
</MarketFareFareData>

```

3.1.1.7 Special Fare

3.1.1.7.1 Description

A promotion fare is to define a specific market on a specific date range.

3.1.1.7.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MarketID	NUM 03	Y			Y	1	Market ID
TravelOrgn	CITY	Y			N	JFK	Travel Origin City
TravelDestn	CITY	Y			N	LHR	Travel Destination City
EffectDate	DATE	Y			N	20000501	Effective Date

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
ImplDate	DATE	N			N	20170501	Implementation Date
DeactDate	DATE	N			N	20170501	Deactivation Date
DiscontDate	DATE	Y			N	20171231	Discontinue Date
Compartment	CHAR 02	Y			N	Y	Compartment Code
SpecialFare	NUM10	Y			N	200	Special Fare

3.1.1.7.3 Processing Rules

None

3.1.1.7.4 Loader Behavior

Insert/update

3.1.1.7.5 Schema

The content of schema can be found at /config/interface/xsd/specialfare.xsd file.

3.1.1.7.6 Example

```
<?xml version="1.0"?>
<SpecialFareData>
  <MFS>
    <MarketID>1</MarketID>
    <TravelOrgn>JFK</TravelOrgn>
    <TravelDestn>LHR</TravelDestn>
    <EffectDate>20000501</EffectDate>
    <ImplDate>20170501</ImplDate>
    <DeactDate>20171231</DeactDate>
    <DiscontDate>20171231</DiscontDate>
    <Compartment>Y</Compartment>
    <SpecialFare>200</SpecialFare>
  </MFS>
  <MFS>
    <MarketID>2</MarketID>
    <TravelOrgn>LHR</TravelOrgn>
    <TravelDestn>DEL</TravelDestn>
    <EffectDate>20170501</EffectDate>
    <ImplDate>20170501</ImplDate>
    <DeactDate>20171231</DeactDate>
    <DiscontDate>20171231</DiscontDate>
    <Compartment>Y</Compartment>
    <SpecialFare>325</SpecialFare>
  </MFS>
</SpecialFareData>
```

3.1.1.8 Marketing Flight Fare

3.1.1.8.1 Description

The marketing flight fare table defines the marketing flight (non-od control) fare for the group system evaluation.

3.1.1.8.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
------------	--------	-------	-------------	----------	----	---------	--------------------

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Origin	CITY	Y			Y	BOM	Origin shall be an airport code
Destination	CITY	Y			Y	LHR	Destination shall be an airport code.
Compartment	CHAR 02	Y			Y	Y	Requested Compartment. This field must be a specific compartment.
Carrier	CARRIER	Y			Y	BA	Carrier Code.
FromFlight	FLIGHT	Y			Y	00001	The <i>FLIGHT</i> field type is the same as the CHAR field type with a maximum length of five (5) characters. This field contains flight numbers. This field may contain only numeric characters
ToFlight	FLIGHT	Y			Y	00200	The <i>FLIGHT</i> field type is the same as the CHAR field type with a maximum length of five (5) characters. This field contains flight numbers. This field may contain only numeric characters
StartDate	DATE	Y			Y	20040801	The start date for which this fare will apply to the flight.
EndDate	DATE	Y			Y	20040801	The end date for which this fare will apply to the flight. .
Frequency	FLAG 07	Y			Y	0000011	The first digit must start with Monday. The example shows Saturday and Sunday are the weekend. Provide 1111111 if frequency is not a sensitive factor.
Value	NUMBER 10	Y			N	100	fare

3.1.1.8.3 Processing Rules

None

3.1.1.8.4 Loader Behavior

Insert/update

3.1.1.8.5 Schema

The content of schema can be found at /config/interface/xsd/mktflightfare.xsd file

3.1.1.8.6 Example

```
<?xml version="1.0"?>
<MktFltFareData>
  <MFF>
    <Origin>PVG</Origin>
    <Destination>FRA</Destination>
```



```

    <Compartment>M</Compartment>
    <Carrier>LH</Carrier>
    <FromFlight>00100</FromFlight>
    <ToFlight>99999</ToFlight>
    <StartDate>20010101</StartDate>
    <EndDate>20090101</EndDate>
    <Frequency>1000010</Frequency>
    <Value>138</Value>
  </MFF>
</MktFltFareData>

```

3.1.1.9 Market Matrix

3.1.1.9.1 Description

Weekend can be defined differently on different market.

3.1.1.9.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MarketID	NUM 03	Y			Y	1	Market ID
WeekendFrequency	FLAG 07	Y			N	0000011	The first digit must start with Monday. The example shows Saturday and Sunday are the weekend.

3.1.1.9.3 Processing Rules

None

3.1.1.9.4 Loader Behavior

Insert/Update

3.1.1.9.5 Schema

The content of schema can be found at /config/interface/xsd/mktmtrix.xsd file.

3.1.1.9.6 Example

```

<?xml version="1.0"?>
<MarketMatrixData>
  <MMG>
    <MarketID>1</MarketID>
    <WeekendFrequency>0000011</WeekendFrequency>
  </MMG>
  <MMG>
    <MarketID>2</MarketID>
    <WeekendFrequency>1100000</WeekendFrequency>
  </MMG>
</MarketMatrixData>

```

3.1.1.10 Market Matrix Date Range

3.1.1.10.1 Description

Specify effective date range values for all fare matrix ids (3.3.1.11) under each market. The market matrix data 3.3.1.9 must exist before the related date range data can be populated.

3.1.1.10.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MarketID	NUM 03	Y			Y	1	Market ID
MatrixID	NUM 03	Y			N	1	Matrix ID
EffectDate	DATE	Y			Y	20090501	Effective Date for the matrix id
DiscontDate	DATE	Y			Y	20101231	Discontinue Date for the matrix id.

3.1.1.10.3 Processing Rules

None

3.1.1.10.4 Loader Behavior

Insert/Update

3.1.1.10.5 Schema

The content of schema can be found at /config/interface/xsd/mkmtmatrixrange.xsd file.

3.1.1.10.6 Example

```
<?xml version="1.0"?>
<MarketMatrixDateRangeData>
  <MMD>
    <MarketID>1</MarketID>
    <MatrixID>1</MatrixID>
    <EffectDate>20080101</EffectDate>
    <DiscontDate>20090101</DiscontDate>
  </MMD>
  <MMD>
    <MarketID>1</MarketID>
    <MatrixID>2</MatrixID>
    <EffectDate>20090101</EffectDate>
    <DiscontDate>20100101</DiscontDate>
  </MMD>
</MarketMatrixDateRangeData>
```

3.1.1.11 Fare Matrix

3.1.1.11.1 Description

This field is to populate the market fare adjustment based on the ratio of the marginal fare to the market fare. If the ratio value is within this range, the additional percentage adjustment will apply to the market fare.

3.1.1.11.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MatrixID	NUM 03	Y			Y	1	Matrix ID
LowBound	NUM 03	Y			N	26	Low bound percentage of marginal fare to market fare
HighBound	NUM 03	Y			N	50	High bound percentage of marginal fare to market fare
AdjPercentage	NUM 03	Y			N	15	Adjustment percentage applies to the market fare

3.1.1.11.3 Processing Rules

None

3.1.1.11.4 Loader Behavior

Insert/Update

3.1.1.11.5 Schema

The content of schema can be found at /config/interface/xsd/farematrix.xsd file.

3.1.1.11.6 Example

```
<?xml version="1.0"?>
<MarketFareAdjustmentData>
  <MFM>
    <MatrixID>1</MatrixID>
    <LowBound>0</LowBound>
    <HighBound>25</HighBound>
    <AdjPercentage>60</AdjPercentage>
  </MFM>
  <MFM>
    <MatrixID>1</MatrixID>
    <LowBound>26</LowBound>
    <HighBound>50</HighBound>
    <AdjPercentage>75</AdjPercentage>
  </MFM>
  <MFM>
    <MatrixID>1</MatrixID>
    <LowBound>51</LowBound>
```

```

    <HighBound>75</HighBound>
    <AdjPercentage>80</AdjPercentage>
  </MFM>
  <MFM>
    <MatrixID>1</MatrixID>
    <LowBound>76</LowBound>
    <HighBound>90</HighBound>
    <AdjPercentage>95</AdjPercentage>
  </MFM>
</MarketFareAdjustmentData>

```

3.1.1.12 Exchange Rate

3.1.1.12.1 Description

The exchange rate table defines the currency and conversion rate for the quoted fare. GRMS will utilize this table and calculate the quoted fare for Adhoc requests. Currently, this logic is only applied to certain carriers.

3.1.1.12.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
LCU	CHAR 03	Y			Y	USD	Local Currency Code.
ExchangeRate	FLT 11.5	Y			Y	1.5	Rate-of-Exchange. Quoted Fare = Local Fare * Exchaneg Rate
EffDate	DATE	Y			Y	20060101	This field contains the date starting from which the Exchange Rate is valid Format: YYYYMMDD
DisContDate	DATE	Y			Y	200600331	This field contains the last departure date the Exchange Rate is valid. Format: YYYYMMDD

3.1.1.12.3 Processing Rule

None

3.1.1.12.4 Loader Behavior

Insert/Update

3.1.1.12.5 Schema

The content of schema can be found at /config/interface/xsd/exchange.xsd file.

3.1.1.12.6 Example

```

<ExchangeRateData>
  <EXR>
    <LCU>TWD</LCU>
    <ExchangeRate>0.03</ExchangeRate>
  </EXR>
</ExchangeRateData>

```

```

    <EffDate>20060101</EffDate>
    <DisContDate>20060131</DisContDate>
  </EXR>

  <EXR>
    <LCU>USD</LCU>
    <ExchangeRate>1.000</ExchangeRate>
    <EffDate>20060101</EffDate>
    <DisContDate>20060131</DisContDate>
  </EXR>
</ExchangeRateData>

```

3.1.1.13 Peak/Off Peak period

3.1.1.13.1 Description

This feature will allow the administrators to configure the application so that specific data based on the departure date ranges can be used to calculate the materialization for a request. The first departure date of the request will be used to determine the seasonal period.

3.1.1.13.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Orgn	CITY	Y			Y	JFK	Name of the origin city for this market. If it is a default market, provide '*' as the orgn.
Dstn	CITY	Y			Y	LHR	Name of the destination city for this market. If it is a default market, provide '*' as the dstn.
CountryPOS	CHAR 05	N			Y	US	Country Point of Sale. If it is a default market, provide '*' as the country pos.
Desc	CHAR 30	N			N		Text. Don't pass this field if there is no value.
<SuperPeak>		N			Y		Provide the SuperPeak if there is any data defined.
<Peak>		N			Y		Provide the Peak if there is any data defined.
<OffPeak>		N			Y		Provide the OffPeak if there is any data defined.

3.1.1.13.2.1 Super Peak

RecordSet: SuperPeak

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
StartDate	DATE	Y			Y	20060101	Format: YYYYMMDD
EndDate	DATE	Y			N	20060101	Format: YYYYMMDD

3.1.1.13.2.2 Peak

RecordSet: Peak

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
------------	--------	-------	-------------	----------	----	---------	--------------------

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
StartDate	DATE	Y			Y	20060101	Format: YYYYMMDD
EndDate	DATE	Y			N	20060101	Format: YYYYMMDD

3.1.1.13.2.3 Off Peak

RecordSet: OffPeak

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
StartDate	DATE	Y			Y	20060101	Format: YYYYMMDD
EndDate	DATE	Y			N	20060101	Format: YYYYMMDD

3.1.1.13.3 Process Rule

Any overlapping of date range across different peak definition will be considered invalid.

3.1.1.13.4 Loader Behavior

Insert

3.1.1.13.5 Schema

The content of schema can be found at /config/interface/xsd/peak.xsd file.

3.1.1.13.6 Example

```
<?xml version="1.0" ?>
<PeakData>
<MKT>
  <Orgn>LAX</Orgn>
  <Dstn>TPE</Dstn>
  <CountryPOS>US</CountryPOS>
  <Desc>This is a pacific market</Desc>
  <SuperPeak>
    <StartDate>20040110</StartDate>
    <EndDate>20040215</EndDate>
  </SuperPeak>

  <SuperPeak>
    <StartDate>20050110</StartDate>
    <EndDate>20050215</EndDate>
  </SuperPeak>

  <SuperPeak>
    <StartDate>20060110</StartDate>
    <EndDate>20060215</EndDate>
  </SuperPeak>

</Peak>

<Peak>
  <StartDate>20040615</StartDate>
  <EndDate>20040715</EndDate>
</Peak>

<Peak>
  <StartDate>20050615</StartDate>
  <EndDate>20050715</EndDate>
</Peak>
```

```

<Peak>
  <StartDate>20060615</StartDate>
  <EndDate>20060715</EndDate>
</Peak>

<OffPeak>
  <StartDate>20040315</StartDate>
  <EndDate>20040430</EndDate>
</OffPeak>

<OffPeak>
  <StartDate>20050315</StartDate>
  <EndDate>20050430</EndDate>
</OffPeak>

<OffPeak>
  <StartDate>20060315</StartDate>
  <EndDate>20060430</EndDate>
</OffPeak>
</MKT>
<MKT>
  <Orgn>*</Orgn>
  <Dstn>*</Dstn>
  <CountryPOS>*</CountryPOS>
  <Desc>This is a default market</Desc>
  <SuperPeak>
    <StartDate>20040716</StartDate>
    <EndDate>20040816</EndDate>
  </SuperPeak>

<SuperPeak>
  <StartDate>20050716</StartDate>
  <EndDate>20050816</EndDate>
</SuperPeak>

<SuperPeak>
  <StartDate>20060716</StartDate>
  <EndDate>20060816</EndDate>
</SuperPeak>

<Peak>
  <StartDate>20041120</StartDate>
  <EndDate>20041130</EndDate>
</Peak>

<Peak>
  <StartDate>20051120</StartDate>
  <EndDate>20051130</EndDate>
</Peak>

<Peak>
  <StartDate>20061120</StartDate>
  <EndDate>20061130</EndDate>
</Peak>

<OffPeak>
  <StartDate>20040216</StartDate>
  <EndDate>20040310</EndDate>
</OffPeak>

```

```

<OffPeak>
  <StartDate>20050216</StartDate>
  <EndDate>20050310</EndDate>
</OffPeak>

<OffPeak>
  <StartDate>20060216</StartDate>
  <EndDate>20060310</EndDate>
</OffPeak>

</MKT>
</PeakData>

```

3.1.1.14 Traffic Area

3.1.1.14.1 Description

The Traffic Area table defines the various customer configured traffic areas.

3.1.1.14.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
TrafficArea	CHAR 03	Y			Y	NA	Traffic Area
Description	CHAR 30	N			N	North America	Traffic Area Description

3.1.1.14.3 Process Rule

None

3.1.1.14.4 Loader Behavior

Insert/Update

3.1.1.14.5 Schema

The content of schema can be found at /config/interface/xsd/trafficarea.xsd file.

3.1.1.14.6 Example

```

<?xml version="1.0"?>
<TrafficAreaData>
  <TAD>
    <TrafficArea>NA</TrafficArea>
    <Description>NORTH AMERICA</TrafficArea>
  </TAD>
  <TAD>
    <TrafficArea>SA</TrafficArea>
    <Description>SOUTH AMERICA</TrafficArea>
  </TAD>
</TrafficAreaData>

```

3.1.1.15 Region

3.1.1.15.1 Description

The Region table defines the various customer configured regions.

3.1.1.15.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Region	CHAR 05	Y			Y	NYN	Region
Description	CHAR 30	N			N	New York City	Region Description

3.1.1.15.3 Process Rule

None

3.1.1.15.4 Loader Behavior

Insert/Update

3.1.1.15.5 Schema

The content of schema can be found at /config/interface/xsd/region.xsd file.

3.1.1.15.6 Example

```
<?xml version="1.0"?>
<RegionData>
  <RGD>
    <Region>NYC</Region>
    <Description>NEW YORK CITY</TrafficArea>
  </RGD>
  <RGD>
    <Region>LON</Region>
    <Description>LONDON</TrafficArea>
  </RGD>
</RegionData>
```

3.1.1.16 Country POS

3.1.1.16.1 Description

The Country POS table defines the various customer configured Country Point of Sales.

3.1.1.16.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CountryPOS	CHAR 05	Y			Y	USA	Country
Description	CHAR 30	N			N	UNITED STATES	Country Description
Region	CHAR 05	N			N	NAM	Region Code
TrafficArea	CHAR 03	N			N	NA	Traffic Area
NameProtectPercent	NUM 03	N			N	80	Minimum name protection percentage value used by the PNRLoad booking profile adjustment.

3.1.1.16.3 Process Rule

None

3.1.1.16.4 Loader Behavior

Insert/Update

3.1.1.16.5 Schema

The content of schema can be found at /config/interface/xsd/country.xsd file.

3.1.1.16.6 Example

```
<?xml version="1.0"?>
<CountryData>
  <CTD>
    <CountryPOS>US</CountryPOS>
    <Description>UNITED STATES</Description>
    <Region>NA</Region>
    <TrafficArea>XX</TrafficArea>
    <NameProtectPercent>90</NameProtectPercent>
  </CTD>
  <CTD>
    <CountryPOS>MX</CountryPOS>
    <Description>MEXICO</Description>
    <Region>NA</Region>
    <TrafficArea>YY</TrafficArea>
    <NameProtectPercent>80</NameProtectPercent>
  </CTD>
</CountryData>
```

3.1.1.17 OAL Fare

3.1.1.17.1 Description

The OAL fare table defines the OAL fare for the group system evaluation

3.1.1.17.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Origin	CITY	Y				BOM	Origin shall be an airport code
Destination	CITY	Y				LHR	Destination shall be an airport code.
PointOfSale	CHAR 10	Y				IN	Point of Sale. This field may be populated by a specific POS value or non-specific POS (*)
ClassCode	SYMBOL 02	Y				A	Fare Class. This field can be a specific class or class nonspecific (*).
Compartment	CHAR 02	Y				Y	Requested Compartment. This field must be a specific compartment.
Carrier	CARRIER	Y				BA	Interline Carrier Code. This field may be populated by either a specific carrier code (BA).

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
ValueType	NUM 01	Y				1	<p>The Value Type field indicates the method of adjustment.</p> <p>Valid values are 1 for factor (multiply) or 2 for actual value passed from the record</p> <p>For example, a Value Type of 1 and Value of 0.8 would multiply the Market Fare by 0.8. This would be the adjusted fare.</p> <p>A Value Type of 2 and value of 200 would indicate that the OAL fare is 200.</p>
Value	FLOAT	Y				0.8	The interline adjustment value for this od/pos/class
StartDate	DATE	Y				20040801	<p>The first departure date for which this interline adjustment become effective.</p> <p>If the same carrier/O&D/compartments/class/pos have different values of start date, then the closest start date to the travel departure date will be used.</p> <p>For example, one start date has value 20080101 and the other has value 20080601. If the travel departure date is 20080815, then the record with start date value 20080601 will be used for the OAL calculation.</p>
EndDate	DATE	N				20040801	<p>The last departure date for which this interline adjustment is effective.</p> <p>If this value is not provided, then the system will consider the record is valid without any expiration date.</p>
TripOrigin	CITY	Y				BOM	Airport code of direction origin
TripDestination	CITY	Y				LHR	Airport code of direction destination
StartTime	CHAR04	Y				1232	Start of time range in 24 hour format
EndTime	CHAR04	N				1756	<p>End of time range in 24 hour format</p> <p>If not provided, G6 will populate 2359 by default</p>
PaxMin	NUM 03	Y				5	Minimum passengers for this fare
PaxMax	NUM 03	N				100	<p>Maximum passengers for this fare</p> <p>If not provided, G6 will populate the default value 999.</p>
Frequency	FLAG 07	Y				0000011	<p>The first digit must start with Monday. The example shows Saturday and Sunday are the weekend.</p> <p>Provide 1111111 if frequency is not a sensitive factor.</p>

3.1.1.17.3 Process Rule

None

3.1.1.17.4 Loader Behavior

Insert/Update

3.1.1.17.5 Schema

The content of schema can be found at /config/interface/xsd/oal.xsd file.

3.1.1.17.6 Example 1

```
<?xml version="1.0"?>
<OALFareData>
  <FVI>
    <Origin>BOM</Origin>
    <Destination>LHR</Destination>
    <PointOfSale>IN</PointOfSale>
    <ClassCode>Y</ClassCode>
    <Compartment>Y</Compartment>
    <Carrier>ZZ</Carrier>
    <ValueType>1</ValueType>
    <Value>0.8</Value>
    <StartDate>20080101</StartDate>
    <EndDate>20081231</EndDate>
    <TripOrigin>IAH</TripOrigin>
    <TripDestination>BEJ</TripDestination>
    <StartTime>1235</StartTime>
    <PaxMin>5</PaxMin>
    <Frequency>0110000</Frequency>
  </FVI>
</OALFareData>
```

3.1.1.17.7 Example 2

```
<?xml version="1.0"?>
<OALFareData>
  <FVI>
    <Origin>BOM</Origin>
    <Destination>LHR</Destination>
    <PointOfSale>IN</PointOfSale>
    <ClassCode>Y</ClassCode>
    <Compartment>Y</Compartment>
    <Carrier>ZZ</Carrier>
    <ValueType>1</ValueType>
    <Value>0.8</Value>
    <StartDate>20080101</StartDate>
    <EndDate>20081231</EndDate>
    <TripOrigin>IAH</TripOrigin>
    <TripDestination>BEJ</TripDestination>
    <StartTime>1235</StartTime>
    <EndTime>1756</EndTime>
    <PaxMin>5</PaxMin>
    <PaxMax>50</PaxMax>
    <Frequency>0110000</Frequency>
  </FVI>
</OALFareData>
```

3.1.1.18 Deposit Deadline

3.1.1.18.1 Description

The deposit deadline table defines the date in which the deposit is due in order to prevent the PNR from being cancelled.

3.1.1.18.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CountryPos	CHAR 02	Y				QR	Country point of sale
RequestType	CHAR 02	Y				A	Request Type can be either Series (S), Adhoc (A) or Both (B)
BookingRangeFrom	NUM 10	Y				360	Maximum number of days prior to the first departure date up to which a deposit is accepted. This is the first part of the Booking Range.
BookingRangeTo	NUM 10	Y				61	Minimum number of days prior to the first departure date up to which a deposit is accepted. This is the second part of the Booking Range.
Period	SYMBOL 02	Y				1	Identifies whether the departure date is within a Peak or Off Peak period. There are 4 types of records that can be defined in the peak/off-peak table. 1) Super Peak – Considered Peak travel period 2) Peak – considered Peak travel Period 3) Off Peak – Off Peak travel Period 4) Default – Not defined as Super Peak, Peak or Off Peak
DepositDeadline	NUM 10	Y				1	The number of days that will be used to determine the deposit deadline date.
DAC	NUM 01	Y				1	Will be either 1 for "Days After Confirmation", or 0 for "Days Prior To Departure".

3.1.1.18.3 Process Rule

None

3.1.1.18.4 Loader Behavior

Insert/Update

3.1.1.18.5 Schema

The content of schema can be found at /config/interface/xsd/depdeadline.xsd file.

3.1.1.18.6 Example 1

```
<?xml version="1.0"?>
<DepositDeadlineData>
  <DDL>
```

```

    <CountryPos>QR</CountryPos>
    <RequestType>A</RequestType>
    <BookingRangeFrom>360</BookingRangeFrom>
    <BookingRangeTo>61</BookingRangeTo>
    <PeriodId>2</PeriodId>
    <DepositDeadline>21</DepositDeadline>
    <DAC>0</DAC >
  </DDL>
</DepositDeadlineData>

```

3.1.1.18.7 Example 2

```

<?xml version="1.0"?>
<DepositDeadlineData>
  <DDL>
    <CountryPos>ES</CountryPos>
    <RequestType>S</RequestType>
    <BookingRangeFrom>60</BookingRangeFrom>
    <BookingRangeTo>46</BookingRangeTo>
    <PeriodId>1</PeriodId>
    <DepositDeadline>23</DepositDeadline>
    <DAC>1</DAC>
  </DDL>
</DepositDeadlineData>

```

3.1.1.19 Name Firming Deadline

3.1.1.19.1 Description

The name firming deadline table defines the name firming percentage and the date in which the name firming is due in order to prevent the PNR from being cancelled.

3.1.1.19.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CountryPos	CHAR 02	Y				QR	Country point of sale
BookingRangeFrom	NUM 10	Y				360	Maximum number of days prior to the first departure date up to which name firming is valid. This is the first part of the Booking Range.
BookingRangeTo	NUM 10	Y				61	Minimum number of days prior to the first departure date up to which name firming is valid. This is the second part of the Booking Range.
NamesPercentage	NUM 03	Y				85	The percentage the name firming must be completed in the determined date.
DeadlineDays	NUM 10	Y				1	The number of days that will be used to determine the name firming deadline.
DAC	NUM 01	Y				1	1 for Days after confirmation, 0 for Days Prior to Departure

3.1.1.19.3 Process Rule

None

3.1.1.19.4 Loader Behavior

Insert/Update

3.1.1.19.5 Schema

The content of schema can be found at /config/interface/xsd/namefirmingdeadline.xsd file.

3.1.1.19.6 Example 1

```
<?xml version="1.0"?>
<NameFirmingDeadlineData>
  <NFD>
    <CountryPos>QR</CountryPos>
    <BookingRangeFrom>360</BookingRangeFrom>
    <BookingRangeTo>61</BookingRangeTo>
    <NamesPercentage>66</NamesPercentage>
    <DeadlineDays>32</DeadlineDays>
    <DAC>0</DAC >
  </NFD>
</NameFirmingDeadlineData>
```

3.1.1.19.7 Example 2

```
<?xml version="1.0"?>
<NameFirmingDeadlineData>
  <NFD>
    <CountryPos>ES</CountryPos>
    <BookingRangeFrom>232</BookingRangeFrom>
    <BookingRangeTo>55</BookingRangeTo>
    <NamesPercentage>85</NamesPercentage>
    <DeadlineDays>42</DeadlineDays>
    <DAC>1</DAC >
  </NFD>
</NameFirmingDeadlineData>
```

3.1.1.20 Flight Group Capacity Control

3.1.1.20.1 Description

The flight group capacity control table defines the percentage limit a group is allowed to book on a certain flight. This percentage number will apply to the adjusted capacity of the flight to derive the maximum group bookings allowed on the flight.

3.1.1.20.2 Data Fields

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CrrCode	CARRIER	Y			Y	ZZ	Carrier Code. Use * if the carrier code is not specified.
FlightNum	FLIGHT 05	Y			Y	00441	Flight number. Use * if the flight number is not specified.
SegOrgn	CITY	Y			Y	IAH	Travel Segment Origin. Group boarding airport point.
SegDstn	CITY	Y			Y	FRA	Travel Segment Destination. Group off-boarding airport point.
CmpCode	SYMBOL 02	Y			Y	Y	Compartment Code.
EffectDate	DATE	Y			Y	20130501	Effective Date

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DiscontDate	DATE	Y			Y	20131231	Discontinue Date
CapacityPercent	NUMBER 03	Y			N	70	Maximum group book percentage.

3.1.1.20.3 Process Rule

None

3.1.1.20.4 Loader Behavior

Insert/Update

3.1.1.20.5 Schema

The content of schema can be found at /config/interface/xsd/fltgroupcapacity.xsd file.

3.1.1.20.6 Example

```
<?xml version="1.0"?>
<FlightCapacityData>
  <FCG>
    <CrrCode>XX</CrrCode>
    <FlightNum>01234</FlightNum>
    <SegOrgn>IAH</SegOrgn>
    <SegDstn>LAX</SegDstn>
    <CmpCode>Y</CmpCode>
    <EffectDate>20130201</EffectDate>
    <DiscontDate>20130501</DiscontDate>
    <CapacityPercent>70</CapacityPercent>
  </FCG>
  <FCG>
    <CrrCode>XX</CrrCode>
    <FlightNum>05678</FlightNum>
    <SegOrgn>IAH</SegOrgn>
    <SegDstn>TPE</SegDstn>
    <CmpCode>Y</CmpCode>
    <EffectDate>20130601</EffectDate>
    <DiscontDate>20130815</DiscontDate>
    <CapacityPercent>65</CapacityPercent>
  </FCG>
  <FCG>
    <CrrCode>*</CrrCode>
    <FlightNum>*</FlightNum>
    <SegOrgn>IAH</SegOrgn>
```



```

    <SegDstn>FRA</SegDstn>
    <CmpCode>Y</CmpCode>
    <EffectDate>201301115</EffectDate>
    <DiscontDate>20131231</DiscontDate>
    <CapacityPercent>70</CapacityPercent>
  </FCG>
</FlightCapacityData>

```

3.1.2 Transactional Data

Transactional data sets are those that change more frequently. The PROS system will maintain as much transactional history as necessary. Records in these data sets must be only those which contain any changes.

	DataSet Name	RecordSet Name	Record Set Description
1	RequestLoad	RHG	Ad hoc Request load
2	PnrLoad	PnrData (LoadingDate ="20051031")	PNR nightly load. We set the attribute at PnrData. This LoadingDate is used to store the date of Reservation System when PNR Load file was created. It is considered as the date when the Reservation System has the data snapshot with any PNR updates.
3	AcceptLoad	AHG	Acceptance Request load
3	SeriesLoad	SHG	Series Request load

3.1.2.1 Ad hoc Request Load

3.1.2.1.1 Description

Group requests collected from Airlines' Mask must be loaded into the PROS Group System. Airlines must provide PROS Group System with a file containing general information for header, direction, date range, and miscellaneous free form text. PROS Group System will use information from the Mask to create a PNR for each group request, if it confirmed.

Although it is possible to include multiple requests in a request file, because of the real-time nature of the data exchange, it is advisable to create a new file for each Group Request. This will prevent any issues that may be caused by file locking while the request file is being processed.

The PROS Group System will accept whatever data is passed to it. If the request file has the necessary data (correct or incorrect) and is formatted correctly, it will be loaded. In the case that the corruption was to the formatting or so severe that the request is not loadable, it will not be loaded. It is the Airlines' responsibility to create the clean load file and put it in the data directory.

Note: Please review the "Data Field" column to create xml or Json (for rest services).

3.1.2.1.2 Data Fields

3.1.2.1.2.1 Request Header

This record contains general request level information. There will be one RHG record for each request.

RecordSet: RHG (for xml) and "rhg" (for JSON)

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML) rqstID (JSON)	CHAR 10	Y				Group433	Unique Reference Number used for identifying a Group Request application.
OutstationID (XML) outstationID (JSON)	CHAR 09	Y				OUT11	Airlines Outstation/Sales office where request originates from.
RequestDate (XML) requestDate (JSON)	DATE	Y				20050930	Date group booking request submitted to G6. Format: YYYYMMDD
RequestTime (XML) requestTime (JSON)	TIME 04	Y				1130	Time group booking request submitted to G6. Format: 0000 – 2359
GroupName (XML) groupName (JSON)	CHAR 50	Y				U OF H GROUP	Name of the group for use in PNR Creation.
ProgramName (XML) programName (JSON)	CHAR 50	N				Summer Travel	Additional identification for Group. Don't pass this field if there is no value.
TourName (XML) tourName (JSON)	CHAR 50	N				Excursion	Additional identification for Group. Don't pass this field if there is no value.
CustomerType (XML) customerType (JSON)	NUM 10	Y	Custome r type			3	Number used to identify category type (e.g.: Leisure, Cruise, Sports, etc.)
AgencyIata (XML) agencyIata (JSON)	CHAR 10	N	Agency			A98765432 1	GDS or other Airlines IATA reference. Don't pass this field if there is no value.
OfficeCode (XML) officeCode (JSON)	CHAR 10	N	Agency			FRALH0860	Office Code. Either IATA or Office Code must exist. Don't pass this field if there is no value.
AgencyName (XML) agencyName (JSON)	CHAR 50	N	Agency			Discount Travelers	GDS or other Airlines Name. Don't pass this field if there is no value.
GroupType (XML) groupType (JSON)	CHAR 02	Y				A	A = Ad hoc S = Series
CityPOS (XML) cityPOS (JSON)	CITY	Y				IAH	Departure Airport for the City where the request originated. In case of new Agency IATA, this field will populate the City POS field in the Agency table in G6. Don't pass this field if there is no value.

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
DistPOS (XML) distPOS (JSON)	CITY	Y				US	Country or Airport code of the City where request originated. In case of new Agency IATA, this field will populate the District POS field in the Agency table in G6. Don't pass this field if there is no value.
MarketOrg (XML) marketOrg (JSON)	CITY	Y	Market O&D			IAH	Default to first direction of origin.
MarketDstn (XML) marketDstn (JSON)	CITY	Y	Market O&D			FRA	Default to first direction of destination.
CommPnct (XML) commPnct (JSON)	NUM 02	Y				0	Agent commission percentage. Must be a whole number.
SeatsRqstd (XML) seatsRqstd (JSON)	NUM 03	Y				20	
SeatsPasses (XML) seatsPasses (JSON)	NUM 03	Y				0	Non-revenue tickets.
MinSeatRqstd (XML) minSeatRqstd (JSON)	NUM 03	N				20	This value will be used only if Passenger negotiation is set (NegoFlag) Its value can only be smaller than the seats requested and greater than 0. If this value is not passed and the NegoFlag is set to Passenger (4), the request will be rejected.
QuotedFare (XML) quotedFare (JSON)	NUM 10	N				500	Price the group is willing to pay per passenger. This fare is compared with the Marginal Fare to determine if the group should be accepted. It must be entered in the Mask by the sales person. However, if the business side determines that group requests can be accepted without a quoted fare, it may be left empty. The quoted fare must be in the same currency of the supporting Revenue Management System (i.e. PROS). Please check on the 3.1.3.8 on maximum positive number 2147483647.
LCU (XML) lcu (JSON)	CHAR 03	N				USD	Currency code of the Airlines Outstation or RES Office (i.e. LAX office = USD, LON office = GBP). Don't pass this field if there is no value.

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
LocalFare (XML) localFare (JSON)	NUM 10	N				500	Fare being charged per person in Local Currency Code as defined above. Don't pass this field if there is no value. Please check on the 3.1.3.8 on maximum positive number 2147483647.
WorkQueueID (XML) workQueueID (JSON)	NUM 03	N				0	Numerical ID of Work Team request will be assigned to. 0 = Central (Default). Don't pass this field if there is no value.
PreferredFlightFlag (XML) preferredFlightFlag (JSON)	FLAG 01	Y				0	Flag to indicate that CCITIN must return from RES options with requested flight only. 1 = Yes 0 = No (Default)
PnrGenFlag (XML) pnrGenFlag (JSON)	FLAG 01	N				1	<p>1 = Yes (Default) 0 = No</p> <p>Flag for G6 to create a PNR should the offered flights/fare be accepted.</p> <p>NOTE: If the PNR Generation Flag is set to no, it is not possible to generate a PNR through the system. The only path to follow is through the negotiation facility. If a request is sent with PNR set to no and an option is sent and accepted by the sales agent, it is clear the agent is ready for a PNR to be generated by the acceptance of the negotiation. In this case, the acceptance message is loaded back to PROS Group System and the user will generate a PNR from the Group Shell/PNR Editor. It is important to remember in this case, the option that is offered by the user is usually a response to the requested flight.</p> <p>If PNR Generation flag is set to no, autopilot will still process the request but it will send options automatically back to the outstations, rather than trying to book the group.</p>

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
RequestTypeFlag (XML) requestTypeFlag (JSON)	FLAG	Y				0	Flag to identify different "types" of requests: 0 = "Regular" request (Default) 1 = Add-on request – to increase the number of seats originally requested 2 = Re-evaluation request – to modify and already booked group.
RPI (XML) rpi (JSON)	NUM 03	N					A priority index for the user to work on the requests. This field is still under design. Don't pass this field if there is no value.
ApExclusive (XML) apExclusive (JSON)	FLAG 01	Y				0	Exclude the request from Autopilot execution Default value is 0. This field will indicate if Autopilot execution will ignore this request for processing. 1: Ignore this request 0: Process this request.
NegoFlag (XML) negoFlag (JSON)	NUM 01	Y				1	Default value is 0. 0: No negotiation allowed. 1: Flight negotiation 2: Fare negotiation (mainly for the preferred flight) 4: Passenger negotiation (mainly for the preferred flight) 3: Fare and Flight negotiation (mainly for the preferred flight)
TotalTripFare (XML) totalTripFare (JSON)	NUM 10	N				500	Total fare for the trip including the OAL fare. Don't pass this field if there is no value.
StsReqAdjFlag (XML) stsReqAdjFlag (JSON)	FLAG 01	N				0	The flag to make the utilization adjustment. 0: no adjustment 1: adjustment. Don't pass this field if there is no value.
DealIndicatorFlag (XML) dealIndicatorFlag (JSON)	CHAR 02	N				G	This field will indicate the Deal Type for each request (Request Header Level). It can have 3 values – G (Ad Hoc), S (Series), M (Ad Hoc). The M would indicate that the Deal will be based on a agreed upon Market Fare
TripType (XML) tripType (JSON)	CHAR 02	N				RT	This field would indicate if the Group Request is for Round Trip (RT) or One Way (OW). Open Jaw Group Request will be send to G6 as a OJ.
SourceCRS (XML) sourceCRS (JSON)	CHAR 05	N				AM	Central Reservation System Code

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
AgentURL (XML) agentURL (JSON)	CHAR 128	N					The URL to send responses back to the Agent
DiscountPercent (XML) discountPercent (JSON)	CHAR 03	N				15	An extra discount percentage for this request associated with the City POS
<RFG> (XML) "rfg" (JSON)		Y					Request Direction
<Note> (XML) "note" (JSON)		Y					Note
<RHP> (XML) "rhp" (JSON)		N					Request PNR Information

3.1.2.1.2.2 Request Direction

This record contains direction level information. There can be multiple RFG(for xml) and rfg (for JSON) records per request, one for each direction.

RecordSet: RFG (for XML) and rfg (for JSON)

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
DirNum (XML) dirNum (JSON)	NUM 02	Y				1	Direction number starting from 1. The outbound direction must be direction 1.
Orgn (XML) orgn (JSON)	CITY	Y				IAH	Boarding point.
Dstn (XML) dstn (JSON)	CITY	Y				FRA	Off point.
SumFareCase (XML) sumFareCase (JSON)	CHAR02	N				CW	Sum of marginal fares for each segment. If blank, use Default set up in SysParms. Don't pass this field if there is no value.
DenyBoardingFactor (XML) denyBoardingFactor (JSON)	CHAR 02	N					Factor used to load marginal fare according to Flight/date demand levels. If blank, use Default set up in SysParms. Don't pass this field if there is no value.
RqstdCmp (XML) rqstdCmp (JSON)	SYMBOL 02	Y	Compartment Cabin mapping			M	Compartment code identifying requested cabin.
PrefClassCode (XML) prefClassCode (JSON)	SYMBOL 02	N				M	Preferred directional booking Class Code. Don't pass this field if there is no value.
PrefClassPOSCode (XML) prefClassPOSCode (JSON)	CHAR 10	N					Preferred directional booking Class POS. Don't pass this field if there is no value.

Data Field	Format	Re q'd	Referential	Validity	PK	Example	Description / Note
Duration (XML) duration (JSON)	NUM 03	N				5	<p>Trip Duration number.</p> <p>1. Not applicable to the first direction.</p> <p>2. Duration or StartDate and EndDate (request range RFD) must be provided.</p> <p>If startDate and endDate are provided (RFD), duration field must be empty.</p> <p>Don't pass this field if there is no value.</p>
QuotedFare (XML) quotedFare (JSON)	NUM 10	N					<p>Directional Quoted. Group system will ignore the Quoted Fare information on the Request Header if the directional quoted fare is provided. Otherwise, the directional quoted fare number will be given by the Request Quoted Fare divided by the number of directions.</p> <p>Don't pass this field if there is no value.</p>
LocalFare (XML) localFare (JSON)	NUM 10	N					<p>Local fare on the directional level. Don't pass this field if there is no value.</p>
PrefDate (XML) prefDate (JSON)	DATE	N					<p>This is the preferred date set at the directional level for the market fare retrieval logic. Don't pass this field if there is no value.</p>
StopOverIndicator (XML) stopOverIndicator (JSON)	NUM 01	N				1	<p>Each direction will have a Stop Over Indicator Flag. If the Flag is 1, then the Quoted Fare includes a Stop Over Cost for that direction. So G6 would need to take that into consideration during the calculation of Marginal Fares. Note that here the stop over means that the time between the 2 connecting flight is between 4 and 24 hours and the Group would like to stay in a hotel for that duration. (Do not confuse this with the way we are used to defining stop over – which usually means a new direction !).</p>
StopOverCost (XML) stopOverCost (JSON)	NUM 10	N					<p>This field will denote the Stop Over cost for that particular direction</p>
<RFD> (XML) "rfd" (JSON)		Y					Request Range information

3.1.2.1.2.3

3.1.2.1.2.4 Request PNR Information

This record contains general request level information.

Record Set: RHP (for XML) and rhp (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
PNRLocator (XML) pnrLocator (JSON)	LOCATOR	N				B32DT2005 0812	This field is used for re-evaluation and PNR request. Don't pass this field if there is no value.
PrimPnrLocator (XML) primPnrLocator (JSON)	LOCATOR	N				B32DT2005 0812	This field is used for re-evaluation and PNR request. Don't pass this field if there is no value. This field must be provided to go along with the PNRLocator. It is used in GRMS to identify whether the PNR is a Primary PNR or a Child PNR. In case of non-split PNRs, this field is the same as PNRLocator field. In case of split PNRs, the locator of the Parent (or Master) PNR goes into this field.
RefPnrLocator (XML) refPnrLocator (JSON)	LOCATOR	N				B32DT2005 0812	In case of add-on group requests the Reference PNR is the PNR that is being added to. In the case of a request originated from a GDS PNR, the Reference PNR must be the GDS PNR. Don't pass this field if there is no value.
TCPNumber (XML) tcpNumber (JSON)	NUM 03	N					Total Number in Group. Don't pass this field if there is no value.
NumOfNames (XML) numOfNames (JSON)	NUM 03	N					Total number of Names confirmed. Don't pass this field if there is no value.

3.1.2.1.2.5 Note

This record contains general request level information. There can be multiple Note records for each request.

RecordSet: Note (for XML) and note (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML) type (JSON)	CHAR04	Y			Y	CTC	The identifier for note text. There is no restriction of unique note type.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Value (XML) value (JSON)	CHAR256	Y					The text content

3.1.2.1.2.6 Request Range

This record contains direction/date range information. There can be multiple RFD record per direction, one for each direction/date range. All RFD records date-time ranges must be mutually disjoint.

RecordSet: RFD (for XML) and rfd (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RangeNum (XML) rangeNum (JSON)	NUM 02	Y			Y	1	Unique Identifier for current and historical PNRs in the G6 system.
StartDate (XML) startDate (JSON)	DATE	Y				20050831	Start Date for preferred travel. Format: YYYYMMDD
EndDate (XML) endDate (JSON)	DATE	Y				20050902	End Date for preferred travel. Format: YYYYMMDD
Frequency (XML) frequency (JSON)	FLAG 07	N				1100111	Day(s) of the Week for preferred travel. The 7 digits are treated as a flag indicator for the day of the week which the first digit represents Monday and the seventh digit represents Sunday. 1011001 = Mon, Wed, Thu, Sun 0100110 = Tue, Fri, Sat. If the Frequency field contains all zeros (0000000), the frequency of RFD record will automatically calculate the entire frequency occurrence from the start date to the end date. Don't pass this field if there is no value.
StartTime (XML) startTime (JSON)	TIME	Y				0000	Start Time for preferred travel. Format: 0000 – 2359
EndTime (XML) endTime (JSON)	TIME	Y				2359	End Time for preferred travel. Format: 0000 – 2359
ArrDptFlag (XML) arrDptFlag (JSON)	FLAG 01	Y				0	Indicates if Dates/Times advised above relate to Departure or Arrival. 1 = Arrival 0 = Departure (Default)
<RFS> (XML) "rfs" (JSON)		N					Request Segment. This field is optional. This is required for the PNR requests.

3.1.2.1.2.7 Request Segment

This record contains Flight/Segment information for preferred flights. Each RFD can have multiple RFS records. If no preferred flight is specified, the RFS record can be omitted.

RecordSet: RFS (for XML) and rfs (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
SegNum (XML) segNum (JSON)	NUM 02	Y			Y	1	The segment number within each direction will start from 1.
SetNum (XML) setNum (JSON)	NUM 02	N				1	<p>This set number is used to group travel flights into a logical set. Different travel options can have different set of preferred flights.</p> <p>By default, the set number will be equal to the SegNum value. The set number will start from 1.</p> <p>For example, flight 100 HOU-TPE as set 1. Flight 101 HOU-TPE as set 2. This example shows different preferred (set) options.</p> <p>Another example shows logical group of flights. Flight 102 HOU-TYO and flight 103 TYO-TPE will both be set 1. Flight 103 TYO-TPE will be the connecting flight for HOU-TPE trip.</p> <p>Although G6 can support preferred flight of many sets, we recommend that this set number can be limited to 3. More distinct set numbers in the loader file may subsequently increase the processing time.</p>
CrrCode (XML) crrCode (JSON)	CARRIER	Y				ZZ	Carrier Code
FlightNum (XML) flightNum (JSON)	FLIGHT 05	Y				441	Flight number
SegOrgn (XML) segOrgn (JSON)	CITY	N				IAH	<p>Travel Segment Origin. Group boarding point.. Don't pass this field if there is no value.</p> <p>PNR requests need to provide this field</p>
SegDstn (XML) segDstn (JSON)	CITY	N				FRA	<p>Travel Segment Destination. Group off-boarding point. PNR requests need to provide this field</p> <p>Don't pass this field if there is no value.</p>

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CmpCode (XML) cmpCode (JSON)	SYMBOL 02	N				M	Compartment Code. Don't pass this field if there is no value.
ClassCode (XML) classCode (JSON)	SYMBOL 02	N				M	Class Code. PNR requests need to provide this field Don't pass this field if there is no value.
DptDate (XML) dptDate (JSON)	DATE	N				20050831	Format: YYYYMMDD. PNR requests need to provide this field Don't pass this field if there is no value.
DptTime (XML) dptTime (JSON)	TIME	N				1545	Format: 0000 – 2359. PNR requests need to provide this field Don't pass this field if there is no value.
ArrTime (XML) arrTime (JSON)	TIME	N				0845	Format: 0000 – 2359. PNR requests need to provide this field Don't pass this field if there is no value.
BkgStatus (XML) bkgStatus (JSON)	CHAR 02	N				HK	This field is required to support re-evaluation. PNR requests need to provide this field Don't pass this field if there is no value.
ClassPOS (XML) classPOS (JSON)	CHAR 10	N					For Airlines who use Class POS for inventory control purposes, the contents of this field will be used to identify the POS associated with the class code defined earlier in the record (e.g. "USA" in Class POS "Y USA"). Don't pass this field if there is no value.

3.1.2.1.3 Processing Rules

None.

3.1.2.1.4 Loader Behavior

Insert /Update

3.1.2.1.5 Schema

The content of schema can be found at /config/interface/xsd/adhoc.xsd file.

3.1.2.1.6 Example

```
<?xml version="1.0" ?>
<RequestLoad>
```

```

<RHG>
  <RqstID>Group433</RqstID>
  <OutstationID>OUT11</OutstationID>
  <RequestDate>20050930</RequestDate>
  <RequestTime>1130</RequestTime>
  <GroupName>U OF H GROUP</GroupName>
  <ProgramName>Summer Travel</ProgramName>
  <TourName>Excursion</TourName>
  <CustomerType>3</CustomerType>
  <AgencyIata>A987654321</AgencyIata>
  <OfficeCode>FRALH0860</OfficeCode>
  <AgencyName>Discount Travellers</AgencyName>
  <GroupType>A</GroupType>
  <CityPOS>IAH</CityPOS>
  <DistPOS>IAH</DistPOS>
  <MarketOrg>IAH</MarketOrg>
  <MarketDstn>FRA</MarketDstn>
  <CommPnt>0</CommPnt>
  <SeatsRqstd>20</SeatsRqstd>
  <SeatsPasses>0</SeatsPasses>
  <MinSeatRqstd>20</MinSeatRqstd>
  <QuotedFare>500</QuotedFare>
  <LCU>USD</LCU>
  <LocalFare>500</LocalFare>
  <WorkQueueID>0</WorkQueueID>
  <PreferredFlightFlag>0</PreferredFlightFlag>
  <PnrGenFlag>1</PnrGenFlag>
  <RequestTypeFlag>0</RequestTypeFlag>
  <RPI>1</RPI>
  <ApExclusive>0</ApExclusive>
  <TotalTripFare>200</TotalTripFare>
  <NegoFlag>1</NegoFlag>
  <StsReqAdjFlag>0</StsReqAdjFlag>
  <DiscountPercent>15</DiscountPercent>
  <Note>
    <Type>CTC</Type>
    <Value> Boris Walden</Value>
  </Note>
  <Note>
    <Type>RCV</Type>
    <Value> Jurgen Singer </Value>
  </Note>
  <Note>
    <Type>SSR</Type>
    <Value> SSR value </Value>
  </Note>
  <Note>
    <Type>OSI</Type>
    <Value> OSI value</Value>
  </Note>
  <Note>
    <Type>IMP</Type>
    <Value>IMP value</Value>
  </Note>
  <Note>
    <Type>HLD</Type>
    <Value>HLD value</Value>

```

```

</Note>
<Note>
  <Type>STO</Type>
  <Value>This is a value to be stored in the Group Shell</Value>
</Note>
<Note>
  <Type>TXT</Type>
  <Value>This is a PNR Remark</Value>
</Note>
<RHP>
  <PNRLocator>B32DT20050812</PNRLocator>
  <PrimPnrLocator>B32DT20050812</PrimPnrLocator>
  <RefPnrLocator></RefPnrLocator>
  <TCPNumber>20</TCPNumber>
  <NumOfNames>10</NumOfNames>
</RHP>
<RFG>
  <DirNum>1</DirNum>
  <Orgn>IAH</Orgn>
  <Dstn>FRA</Dstn>
  <SumFareCase>CW</SumFareCase>
  <DenyBoardingFactor></DenyBoardingFactor>
  <RqstdCmp>M</RqstdCmp>
  <PrefClassCode>Y</PrefClassCode>
  <PrefClassPOSCode>ALL</PrefClassPOSCode>
  <Duration></Duration>
  <QuotedFare>500</QuotedFare>
  <LocalFare>500</LocalFare>
  <RFD>
    <RangeNum>1</RangeNum>
    <StartDate>20050831</StartDate>
    <EndDate>20050902</EndDate>
    <Frequency>1100111</Frequency>
    <StartTime>0000</StartTime>
    <EndTime>2359</EndTime>
    <ArrDptFlag>0</ArrDptFlag>
    <RFS>
      <SegNum>1</SegNum>
      <CrrCode>ZZ</CrrCode>
      <FlightNum>441</FlightNum>
      <SegOrgn>IAH</SegOrgn>
      <SegDstn>FRA</SegDstn>
      <CmpCode>M</CmpCode>
      <ClassCode>Y</ClassCode>
      <DptDate>20050831</DptDate>
      <DptTime>1545</DptTime>
      <ArrTime>0845</ArrTime>
      <BkgStatus>HK</BkgStatus>
      <ClassPOS>ALL</ClassPOS>
    </RFS>
  </RFD>
</RFG>
<RFG>
  <DirNum>2</DirNum>
  <Orgn>FRA</Orgn>
  <Dstn>IAH</Dstn>
  <SumFareCase>CW</SumFareCase>

```

```

    <DenyBoardingFactor></DenyBoardingFactor>
    <RqstdCmp>M</RqstdCmp>
    <PrefClassCode>Y</PrefClassCode>
    <PrefClassPOSCode></PrefClassPOSCode>
    <Duration>5</Duration>
    <QuotedFare>500</QuotedFare>
    <LocalFare>500</LocalFare>
    <RFD>
      <RangeNum>1</RangeNum>
      <StartDate>20050912</StartDate>
      <EndDate>20050915</EndDate>
      <Frequency>1100111</Frequency>
      <StartTime>0000</StartTime>
      <EndTime>2359</EndTime>
      <ArrDptFlag>0</ArrDptFlag>
      <RFS>
        <SegNum>1</SegNum>
        <CrrCode>ZZ</CrrCode>
        <FlightNum>440</FlightNum>
        <SegOrgn>FRA</SegOrgn>
        <SegDstn>IAH</SegDstn>
        <CmpCode>M</CmpCode>
        <ClassCode>Y</ClassCode>
        <DptDate>20050912</DptDate>
        <DptTime>0945</DptTime>
        <ArrTime>1545</ArrTime>
        <BkgStatus>HK</BkgStatus>
        <ClassPOS>ALL</ClassPOS>
      </RFS>
    </RFD>
  </RFG>
</RHG>
</RequestLoad>

```

3.1.2.1.7 JSON adhoc request load via adhoc rest loader endpoint

Endpoint: /group/rest/submitAdhocRequest

Exmple: <http://localhost:8080/group/rest/submitAdhocRequest>

3.1.2.1.8 Example for JSON content for adhoc request loader

```

{
  "rhg": {
    "rqstID": "A12345",
    "outstationID": "PGKGA0101",
    "requestDate": "20171205",
    "requestTime": "0513",
    "groupName": "RETA GROUP",
    "customerType": 2,
    "agencyIata": "15394466",
    "officeCode": "PGKGA0101",
    "agencyName": "RETA GROUP",
    "groupType": "A",
    "cityPOS": "PGK",
    "distPOS": "ID",
    "marketOrg": "CGK",
    "marketDstn": "PGK",
    "commPnct": 0,

```

```

"seatsRqstd": 11,
"seatsPasses": 2,
"lcu": "USD",
"localFare": 9000.0,
"workQueueID": 0,
"preferredFlightFlag": 0,
"pnrGenFlag": 1,
"requestTypeFlag": 0,
"rpi": 1,
"totalTripFare": 100.0,
"negoFlag": 0,
"stsReqAdjFlag": 0,
"note": [{
    "type": "TXT",
    "value": "SAMPLE"
},
{
    "type": "TXT",
    "value": "RP/PGKGA0101/PGKGA0101"
},
{
    "type": "TXT",
    "value": "SAMPLE1"
}],
"rhp": {
    "pnrLocator": "K5KRE920171205",
    "primPnrLocator": "K5KRE920171205",
    "tcpNumber": 0,
    "numOfNames": 0
},
"rfg": [{
    "dirNum": 1,
    "orgn": "CGK",
    "dstn": "PGK",
    "sumFareCase": null,
    "rqstdCmp": "Y",
    "prefClassCode": "G",
    "rfd": [{
        "rangeNum": 1,
        "startDate": "20180102",
        "endDate": "20180102",
        "startTime": "0000",
        "endTime": "2359",
        "arrDptFlag": 0,
        "rfs": [{
            "segNum": 1,
            "crrCode": "GA",
            "flightNum": "138",
            "segOrgn": "CGK",
            "segDstn": "PGK",
            "cmpCode": "Y",
            "classCode": "G",
            "dptDate": "20180102",
            "dptTime": "1505",
            "arrTime": "1625",
            "bkgStatus": "HN"
        }]
    }]
}]
}
}

```

3.1.2.2 PNR Load

3.1.2.2.1 Description

The group Materialization process uses selected historical performance to predict the group utilization. It continuously tracks and monitors group behavior until departure; this process is performed by the PNRLOAD.

The group Materialization process uses selected historical performance to predict the group utilization. It continuously tracks and monitors group behavior until departure; this process is performed by the PNRLOAD. The section below describes the detail of the input file format for group tracking.

3.1.2.2.2 Data Fields

There can be multiple PBG records for each input file.

RecordSet: PBG

Data Field	Format	Req'd	Refere ntial	Validity	PK	Example	Description / Note
PnrLocator	LOCATOR	Y			Y	B32DT20 050812	PNR Locator
PrimPnrLocator	LOCATOR	Y				B32DT20 050812	Primary PNR Locator
RefPnrLocator	LOCATOR	N				B32DT20 050812	Reference PNR Locator. Don't pass this field if there is no value.
TotalRevenue	NUM 10	N				100	The total fare for the entire group to travel on the trip. Don't pass this field if there is no value. This value is used to calculate the real fare value. If LCU related fields are populated, then the real fare value will be calculated by LCU related fields instead. Please check the LCU comment under <PMG>. Note: The LCU related fields are LCU, local fare, and exchange rate.

Data Field	Format	Req'd	Refere ntial	Validity	PK	Example	Description / Note
TotalGroupBooked	NUM 03	Y				100	<p>Total seats booked for the Group.</p> <p>When the whole PNR is cancelled, this value must be 0. Otherwise, this value must not be 0 regardless the non-confirmed status of any PNR itinerary. In other words, this value is not 0 as long as the whole PNR is not cancelled.</p> <p>NOTE: The "Total PNR Group Bookings" can differ from the number of "PNR Segment Group Bookings" (in the PFG record). The difference may be caused, for example by Waitlisted Group's counts, which must also be included in this field. E.G.:</p> <p>If a group of 20 passengers was requested, but only 10 could be confirmed, this field would contain 20, but the fields in the PFG record would have 10 each:</p> <p>ZZ 090 IAH-FCO 10 KK ZZ 090 IAH-FCO 10 WL</p> <p>Another difference could be caused by itineraries with feeders. For example: DFW – IAH – FCO SAT – IAH – FCO</p> <p>In this case, the size of the whole group is of 20 (who will be traveling IAH – FCO). The whole number must be reflected in this field. However, 12 passengers may come from DFW and 8 from SAT. These numbers will have to be reflected in different PFG lines.</p>
NumConfirmedNames	NUM 03	Y				10	Total number of individual passenger's Names advised.
CancellationIndicatorFlag	FLAG 01	Y				0	<p>Used for complete itinerary cancellation.</p> <p>0 = not canceled (Default) 1 = canceled</p>
CancellationCode	CHAR 03	N					Type of cancellation for future utilization profile. Don't pass this field if there is no value.
OutBoundIndicatorFlag	FLAG 01	Y				1	<p>0 = Inbound 1 = Outbound (Default)</p>
RqstID	CHAR 10	N					Request Identification (ID). Don't pass this field if there is no value.
<PMG>		Y					Miscellaneous information for the group shell and PNR booking
<PFG>		N					

3.1.2.2.1 PNR Itinerary

This record contains Flight Segment level information. There can be multiple PFG records for each PBG record.

All active segments in the itinerary must be captured, including informational segments.

In case of cancellations, two different cases have observed:

➔ Total cancellation of the PNR

In case of whole group cancellations, some reservations systems will remove all itineraries' information from the PNR. Therefore, Airlines will not be able to supply this record during PNR cancellation. If the cancellation indicator in the PBG record = 1, then no PFG records will be included in the file. However if based on the RES functionality is the information can be provided, it is advisable to send the appropriate data to the PROS Group System.

➔ Partial cancellation of the PNR

When only a portion (i.e. a segment) of the group has been canceled, the PFG record should be passed with the Airline's canceled status code (e.g.: XX).

RecordSet:PFG

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
ItnLineNum	NUM 02	Y				1	Itinerary Line Number
CrrCode	CARRIER	Y				ZZ	Carrier Code
FlightNum	FLIGHT 05	Y				100	Flight Number
SegOrgn	CITY	Y				FRA	Segment Origin
SegDstn	CITY	Y				JFK	Segment Destination
DptDate	DATE	Y				20051031	Departure Date
ClassCode	SYMBOL 02	Y				H	Class Code
BkgStatusCode	CHAR 02	Y				HK	Booking Status Code
DptTime	TIME 04	Y				1030	Departure Time
ArrTime	TIME 04	Y				1930	Arrival Time
SegGrpBkd	NUM 03	Y				10	Number of Group PNR bookings on the Segment.
DateOffset	NUM 02	Y				0	The difference in days between the departure day of traveled segment and the departure day for the first leg of the flight. If the information cannot be provided by the airline, a default value of 99 must be used. In this case, the Group System will retrieve schedule information from the P5 and O&D System to get the Date Offset information. This will cause a slight deterioration in performance.
ClassPOS	CHAR 10	N					

3.1.2.2.2 PNR Information

There can be one PMG record for each PBG record. IMPORTANT NOTE: For groups that are booked outside of the Group System, this record must be populated.

RecordSet:PMG

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
GroupName	CHAR 50	Y				2P1A1/T2P 1A1200308 06	Group Name
ProgramName	CHAR 50	N					Program Name. Don't pass this field if there is no value.
TourName	CHAR 50	N					Tour Name. Don't pass this field if there is no value.
CustType	NUM 10	Y	Customer Type			3	Customer Type key value. If the information cannot be provided by the airline, a default value of 0 must be used. In this case, the Group System will keep the existing information from Group Shell table for this PNR family.
GroupType	CHAR 02	N				A	Group Type A = ad hoc S = series We strongly recommend that the G6 user can provide correct group type information (A or S). If this value is empty, G6 will keep the old group type value for any existing PNR. G6 will set the default value 'A' if this group type is not provided and this PNR is new to G6.
MktOrgn	CITY	N				JFK	Market Origin. Don't pass this field if there is no value.
MktDstn	CITY	N				DEL	Market Destination. Don't pass this field if there is no value.
CityPOS	CITY	N				JFK	City Point of Sale. Don't pass this field if there is no value.
DistPOS	CITY	N				US	District Point of Sale. Don't pass this field if there is no value.
AgencyIATA	CHAR 10	N	Agency			A98765432 1	Agency IATA. Don't pass this field if there is no value.
OfficeCode	CHAR 10	N	Agency			FRALH0860	Office Code. Either IATA or Office Code must exist. Don't pass this field if there is no value.
AgencyName	CHAR 50	N	Agency			ABC TRAVEL AGENCY	Agency Name. Don't pass this field if there is no value.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
LCU	CHAR 03	N				USD	Local Currency Code. Don't pass this field if there is no exchange rate information. The exchange rate information can be provided in the following filed or in the exchange rate reference table. This field is used to calculate the real fare value for this PNR. Please ensure that the exchange rate information is properly populated before this filed can be used.
ExchangeRate	FLT 11.5	N				1.5	Rate-of-Exchange. Don't pass this field if there is no value. G6 will use this value to calculate real fare value if LocalFare and LCU are both provided in the file. Otherwise, G6 will retrieve the exchange rate information from the G6 database for the real fare calculation.
SpecialHandlingRequest	CHAR 20	N					Special Handle Request. Don't pass this field if there is no value.
LocalFare	NUM 10	N					Local fare on the PNR level. Don't pass this field if there is no value. Please refer to the LCU and ExchangeRate comments above. Please check on the 3.1.3.8 on maximum positive number 2147483647
AncillaryRevenue	NUM 10	N				150	This is the sum of the ancillary revenue for the selected options.
OutstationID	CHAR 09	N				OUT11	Airlines Outstation/Sales office where request originates from.

3.1.2.2.3 Processing Rule

None.

3.1.2.2.4 Loader Behavior

Insert/Update

3.1.2.2.5 Schema

The content of schema can be found at /config/interface/xsd/pnrload.xsd file.

3.1.2.2.6 Example

```
<?xml version="1.0"?>
<PnrLoad>
  <PnrData LoadingDate="20050806">
    <PBG>
```

```

<PnrLocator>2P1A1/T2P1A120030806</PnrLocator>
<PrimPnrLocator>2P1A1/T2P1A120030806</PrimPnrLocator>
<RefPnrLocator></RefPnrLocator>
<TotalRevenue>0</TotalRevenue>
<TotalGroupBooked>100</TotalGroupBooked>
<NumConfirmedNames>10</NumConfirmedNames>
<CancellationIndicatorFlag>0</CancellationIndicatorFlag>
<CancellationCode></CancellationCode>
<OutBoundIndicatorFlag>1</OutBoundIndicatorFlag>
<RqstID></RqstID>
<PMG>
  <GroupName>GROUP</GroupName>
  <ProgramName>Student Program </ProgramName>
  <TourName>Major city tour</TourName>
  <CustType>0</CustType>
  <GroupType>A</GroupType>
  <MktOrgn>FRA</MktOrgn>
  <MktDstn>JFK</MktDstn>
  <CityPOS>VER</CityPOS>
  <Request>EU</Request>
  <AgencyIATA>IATA</AgencyIATA>
  <AgencyName>Travel agency</AgencyName>
  <LCU>EU</LCU>
  <ExchangeRate>0</ExchangeRate>
  <SpecialHandlingRequest>special handling</SpecialHandlingRequest>
  <LocalFare>0</LocalFare>
</PMG>
<PFG>
  <ItnLineNum>1</ItnLineNum>
  <CrrCode>ZZ</CrrCode>
  <FlightNum>400</FlightNum>
  <SegOrgn>FRA</SegOrgn>
  <SegDstn>JFK</SegDstn>
  <DptDate>20040621</DptDate>
  <ClassCode>H</ClassCode>
  <BkgStatusCode>HK</BkgStatusCode>
  <DptTime>1030</DptTime>
  <ArrTime>1305</ArrTime>
  <SegGrpBkd>100</SegGrpBkd>
  <DateOffset>0</DateOffset>
  <ClassPOS>ALL</ClassPOS>
</PFG>
</PBG>
<PBG>
  <PnrLocator>2P1A2/T2P1A220030806</PnrLocator>
  <PrimPnrLocator>2P1A1/T2P1A120030806</PrimPnrLocator>
  <RefPnrLocator>2P1A1/T2P1A120030806</RefPnrLocator>
  <TotalRevenue>0</TotalRevenue>
  <TotalGroupBooked>40</TotalGroupBooked>
  <NumConfirmedNames>4</NumConfirmedNames>
  <CancellationIndicatorFlag>0</CancellationIndicatorFlag>
  <CancellationCode>CNL</CancellationCode>
  <OutBoundIndicatorFlag>1</OutBoundIndicatorFlag>
  <RqstID>A1234567</RqstID>
  <PMG>
    <GroupName>CHILD</GroupName>
    <ProgramName>Child program</ProgramName>

```

```

    <TourName>Child tour</TourName>
    <CustType>0</CustType>
    <GroupType>A</GroupType>
    <MktOrgn>FRA</MktOrgn>
    <MktDstn>JFK</MktDstn>
    <CityPOS>VER</CityPOS>
    <Request>EU</Request>
    <AgencyIATA>IATA</AgencyIATA>
    <OfficeCode>OfficeCode</OfficeCode>
    <AgencyName>World Travel</AgencyName>
    <LCU>EU</LCU>
    <ExchangeRate>0</ExchangeRate>
    <SpecialHandlingRequest>Special handling</SpecialHandlingRequest>
    <LocalFare>0</LocalFare>
  </PMG>
  <PFG>
    <ItineraryLineNum>1</ItineraryLineNum>
    <CrrCode>ZZ</CrrCode>
    <FlightNum>150</FlightNum>
    <SegOrgn>FRA</SegOrgn>
    <SegDstn>JFK</SegDstn>
    <DptDate>20040621</DptDate>
    <ClassCode>H</ClassCode>
    <BkgStatusCode>HK</BkgStatusCode>
    <DptTime>1030</DptTime>
    <ArrTime>1305</ArrTime>
    <SegGrpBkd>100</SegGrpBkd>
    <DateOffset>0</DateOffset>
    <ClassPOS>All</ClassPOS>
  </PFG>
</PBG>
</PnrData>
</PnrLoad>

```

3.1.2.3 Acceptance Load

3.1.2.3.1 Description

The Acceptance Queue contains the options accepted by the Outstation. The accepted options will be compared with the time/date stamp on the held record. If the record is not stale (based on a system parameter), the options accepted by the outstation will be automatically processed. However, if anything in the acceptance file has changed, it will not be eligible for auto-acceptance and further evaluation or manual review is required. AAP (Autopilot for Acceptance Queue) will process the Acceptance Requests automatically if the AAP flag is set during the Negotiation stage.

Note that the negotiation process does not allow multiple iterations of this exchange. There is no facility that to send back to the Outstation a request that has gone back to the Acceptance Queue. There is no facility to get back to the holding queue from the acceptance queue. If a request is stale, or for any other reason the Group user does not believe the group should be accepted (e.g.: the fare is unacceptable), the request should be treated as a new one.

3.1.2.3.2 Data Fields

3.1.2.3.2.1 Header information

This record contains general request level information. There will be one AHG record for each request.

DatasetName: AcceptanceLoad

RecordSet: AHG (for XML) and ahg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML) rqstID (JSON)	CHAR 10	Y				Group433	Unique Reference Number used for identifying a Group Request application.
OutstationID (XML) outstationID (JSON)	CHAR 09	Y				OUT11	Airlines Outstation/Sales office where request originates from.
RequestDate (XML) requestDate (JSON)	DATE	Y				20050930	Date group booking request submitted to G6. YYYYMMDD
RequestTime (XML) requestTime (JSON)	TIME 04	Y				1130	Time group booking request submitted to G6. Format: 0000 – 2359
AcceptedFare (XML) acceptedFare (JSON)	NUM 10	N				500	Accepted fare. This fare is NOT required on the request header level if they are provided in the direction level below (AFG). In the case where the fares are provided on both levels (header and direction) GRMS will use the fares in the direction level with higher priority and override the fare in the request header level with the sum of all the directions. Please check on the 3.1.3.8 on maximum positive number 2147483647. Final note: The Accepted fare must be provided in either the request header level or direction level. If neither one is provided then it GRMS considered as an error.
LocalFare (XML) localFare (JSON)	NUM 10	N				500	The Local Fare value in the Local Currency Code for the acceptance fare. If this is not provided GRMS will calculate it based on the exchange rate used in the original request. Do not pass this field if the value is NULL. Please check on the 3.1.3.8 on maximum positive number 2147483647.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
StaleFlag (XML) staleFlag (JSON)	FLAG 01	Y				0	This field is still under design. Current program will ignore this field.
<AFG> (XML) "afg" (JSON)		Y					Request Direction/Option information. Normal option contains one option per direction. Break-up options will have multiple options per direction.
<Note> (XML) "note" (JSON)		Y					Note for the acceptance. However, duplicate Note entries can occur if the same Notes sent 72tilizat in the Holding file/Request files are returned with the Acceptance file. This is because the acceptance process expects only new notes will be sent in the acceptance file.

3.1.2.3.2.2 Direction information

This AFG record contains directional information for the approved options.

RecordSet: AFG (for XML) and afg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DirNum (XML) dirNum (JSON)	NUM 02	Y				1	Direction number
AcceptedFare (XML) acceptedFare (JSON)	NUM 10	N				200	Accepted fare. This fare is NOT required on the direction level if one has already been provided in the request header level (AHG). In the case where the fares are provided on both levels (header and direction) GRMS will use the fares in the direction level with higher priority and override the fare in the request header level with the sum of all the directions. If the fare is provided in at least 1 direction then all direction(s) must have the fare provided, otherwise GRMS considered this as error. Final note: The Accepted fare must be provided in either the request header level or direction level. If neither one is provided then it GRMS considered as an error.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
LocalFare (XML) localFare (JSON)	NUM 10	N					The Local Fare value in the Local Currency Code for the acceptance fare. If this is not provided GRMS will calculate it based on the exchange rate used in the original request. Do not pass this field if the value is NULL. Please check on the 3.1.3.8 on maximum positive number 2147483647.
<AFO> (XML) "afo" (JSON)		Y					Option information

3.1.2.3.2.3 Option information

This AFO record contains information for the approved options per AFG record.

RecordSet: AFO (for XML) and afo (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
OptID (XML) optID (JSON)	NUM 04	Y				1	Option ID.
SubOptID (XML) subOptID (JSON)	NUM 04	Y				1	Sub Option ID. When Sub Option is not the same with Option ID, it indicates option break up.
ClassCode (XML) classCode (JSON)	SYMBOL 02	Y				M	Class symbol for this option
ClassPOS (XML) classPOS (JSON)	CHAR 10	N				M	
<AFF> (XML) "aff" (JSON)		N					

3.1.2.3.2.3.1 Option Flight information

This AFF record contains information for the option flight per AFF record.

There can be multiple AFF records. Each record contains the information for each traveled flight constituting each itinerary option.

RecordSet: AFF (for XML) and aff (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CrrCode (XML) crrCode (JSON)	CARRIER	Y				ZZ	Carrier Code

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
FlightNum (XML) flightNum (JSON)	FLIGHT 05	Y				441	Flight number
ClassCode (XML) classCode (JSON)	SYMBOL 02	Y				M	Class symbol for this flight
ClassPOS (XML) classPOS (JSON)	CHAR 10	N				ALL	Class Point of Sale

3.1.2.3.2.4 Note information

There can be multiple Note records for each request.

RecordSet: Note

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML) type (JSON)	CHAR 04	Y			Y	CTC	The identifier for note text. There is no restriction of unique note type.
Value (XML) value (JSON)	CHAR 256	Y					The text content

3.1.2.3.3 Processing Rules

None

3.1.2.3.4 Loader Behavior

Insert/Update

3.1.2.3.5 Schema

The content of schema can be found at /config/interface/xsd/acc.xsd file.

3.1.2.3.6 Example

```
<?xml version="1.0" ?>
<AcceptanceLoad>
  <AHG>
    <RqstID>Group433</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <AcceptedFare>500</AcceptedFare>
    <LocalFare>500</LocalFare>
    <StaleFlag>0</StaleFlag>
    <Note>
      <Type>CTC</Type>
      <Value> Boris Walden</Value>
    </Note>
  </Note>
</AcceptanceLoad>
```

```

        <Type>RCV</Type>
        <Value> Jurgen Singer </Value>
    </Note>
    <Note>
        <Type>SSR</Type>
        <Value> SSR value </Value>
    </Note>
    <Note>
        <Type>OSI</Type>
        <Value> OSI value</Value>
    </Note>
    <Note>
        <Type>IMP</Type>
        <Value>IMP value</Value>
    </Note>
    <Note>
        <Type>HLD</Type>
        <Value>HLD value</Value>
    </Note>
    <Note>
        <Type>STO</Type>
    <Value>This is a value to be stored in the Group Shell after PNRGen</Value>
    </Note>
    <Note>
        <Type>TXT</Type>
        <Value>This is a PNR Remark</Value>
    </Note>
    <AFG>
        <DirNum>1</DirNum>
        <AcceptedFare>500</AcceptedFare>
        <LocalFare>500</LocalFare>
        <AFO>
            <OptID>1</OptID>
            <SubOptID>1</SubOptID>
            <ClassCode>Y</ClassCode>
            <ClassPOS>USA</ClassPOS>
        </AFO>
    </AFG>
</AHG>
</AcceptanceLoad>

```

3.1.2.3.7 JSON load via Acceptance rest loader

Rest Endpoint: **/group/rest/submitAcceptRequest**

Example: <http://localhost:8080/group/rest/submitAcceptRequest>

3.1.2.3.8 Example JSON content for acceptance rest loader

```

{
  "ahg": {
    "rqstID": "A1078",
    "outstationID": "HOMEOFFIC",
    "requestDate": "20180613",
    "requestTime": "1345",
    "acceptedFare": 0.2,
    "localFare": 2.1,
    "staleFlag": 0,
    "afg": [
      {
        "dirNum": 1,
        "acceptedFare": 1.0,

```

```

        "localFare":1.0,
        "afo":{
            "optID":1,
            "subOptID":1.256,
            "classCode":"S",
            "aff":[
                {
                    "crrCode": "QR",
                    "flightNum": "123",
                    "classCode": "G",
                    "classPOS": "H"
                },
                {
                    "crrCode": "QR",
                    "flightNum": "124",
                    "classCode": "G",
                    "classPOS": "H"
                }
            ]
        }
    },
    {
        "dirNum":2,
        "acceptedFare":1.0,
        "localFare":1.0,
        "afo":{
            "optID":1,
            "subOptID":1,
            "classCode":"S"
        }
    }
],
"note":[
    {
        "type":"CTC",
        "value":"Accepted"
    }
]
}
}

```

3.1.2.4 Series Request Load

3.1.2.4.1 Description

The Series loader is a non-interactive program to load the Series requests into the database. The Series requests are in a XML file given to the loader. The loading program also will calculate the utilization for each request and store the results in the database. New data will be stored automatically in the corresponding tables.

The PROS Group System will accept whatever data is passed to it. If the request file has the necessary data (correct or incorrect) and is formatted correctly, it will be loaded. In the case that the corruption was to the formatting or so severe that the request is not loadable, it will not be loaded. It is the Airlines' responsibility to create the clean load file and put it in the data directory.

3.1.2.4.2 Data Fields

3.1.2.4.2.1 Request Header

This record contains general request level information. There will be one SHG record for each request.

RecordSet: SHG (for XML) and shg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML) RqstID (JSON)	CHAR 10	Y			Y	Group433	Unique Reference Number used for identifying a Group Request application.
OutstationID (XML) outstationID (JSON)	CHAR 09	Y			Y	OUT11	Airlines Outstation/Sales office where request originates from.
RequestDate (XML) requestDate (JSON)	DATE	Y			Y	20050930	Date group booking request submitted to G6. Format: YYYYMMDD
RequestTime (XML) requestTime (JSON)	TIME 04	Y			Y	1130	Time group booking request submitted to G6. Format: 0000 – 2359
GroupName (XML) groupName (JSON)	CHAR 50	Y				U OF H GROUP	Name of the group for use in PNR Creation.
ProgramName (XML) programName (JSON)	CHAR 50	N				Summer Travel	Additional identification for Group.
TourName (XML) tourName (JSON)	CHAR 50	N				Excursion	Additional identification for Group. Don't pass this field if there is no value.
CustomerType (XML) customerType (JSON)	NUM 10	Y	Customer type			3	Number used to identify category type (e.g.: Leisure, Cruise, Sports, etc.)
AgencyIata (XML) agencyIata (JSON)	CHAR 10	N	Agency			A987654321	GDS or other Airlines IATA reference. Don't pass this field if there is no value.
OfficeCode (XML) officeCode (JSON)	CHAR 10	N	Agency			FRALH0860	Office Code. Either IATA or Office Code must exist. Don't pass this field if there is no value.
AgencyName (XML) agencyName (JSON)	CHAR 50	N	Agency			Discount Travelers	GDS or other Airlines Name. Don't pass this field if there is no value.
GroupType (XML) groupType (JSON)	CHAR 02	Y				S	A = Ad hoc S = Series

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
WorkQueueID (XML) workQueueID (JSON)	NUM 03	N				0	Numerical ID of Work Queue request will be assigned to. 0= Central (Default). Don't pass this field if there is no value.
PartialConfirm Flag (XML) partialConfirm Flag (JSON)	FLAG 01	Y				1	2 = Allow Partial Confirmation 0 = Do not allow Partial Confirmation (default) This flag is used for the outside reservation window feature.
PreferredFlag (XML) preferredFlag (JSON)	FLAG 01	Y				1	Flag to indicate that CCITIN must return from RES options with requested flight only. 1 = Yes (Default) 0 = No
SeriesID (XML) seriesID (JSON)	NUM 38	N					This field is designed specifically for the Kebut interface. Normal series request should not provide this information.
AgentURL (XML) agentURL (JSON)	CHAR128	N					The URL to send responses back to the agent.
<SPG> (XML) "spg" (JSON)							Pattern information

3.1.2.4.2.2 Pattern Information

This record contains pattern level information. There can be multiple SPG records for each request – one for each pattern.

RecordSet: SPG (for XML) and spg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
PattNum (XML) pattNum (JSON)	NUM 02	Y			Y	1	Number of pattern block
CityPOS (XML) cityPOS (JSON)	CITY	Y				IAH	Departure Airport for the City where the request originated. In case of new Agency IATA, this field will populate the City POS field in the Agency table in G6.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DistPOS (XML) distPOS (JSON)	CITY	Y				US	Country or Airport code of the City where request originated. In case of new Agency IATA, this field will populate the District POS field in the Agency table in G6.
MarketOrg (XML) marketOrg (JSON)	CITY	Y	Market O&D			IAH	Default to first direction of origin.
MarketDstn (XML) marketDstn (JSON)	CITY	Y	Market O&D			FRA	Default to first direction of destination.
CommPnct (XML) commPnct (JSON)	NUM 02	Y				0	Agent commission percentage. Must be a whole number.
LCU (XML) Lcu (JSON)	CHAR 03	N				USD	Currency code of the Airlines Outstation or RES Office (i.e. LAX office = USD, LON office = GBP). Don't pass this field if there is no value.
DealIndicatorFlag (XML) dealIndicatorFlag (JSON)	CHAR 02	N				G	This field will indicate the Deal Type for each request (Request Header Level). It can have 3 values – G (Ad Hoc), S (Series), M (Ad Hoc). The M would indicate that the Deal will be based on a agreed upon Market Fare
TripType (XML) tripType (JSON)	CHAR 02	N				RT	This field would indicate if the Group Request is for Round Trip (RT) or One Way (OW). Open Jaw Group Request will be send to G6 as a OJ.
DiscountPercent (XML) discountPercent (JSON)	CHAR 03	N				15	An extra discount percentage for this request associated with the City POS
<Note> (XML) Note (JSON)		N					Note
<SFI> (XML) Sfi (JSON)		Y					Fare information
<SDT> (XML) Sdt (JSON)		Y					Departure Information

3.1.2.4.2.3 Fare Information

This record contains fare information for the pattern. There can be multiple SFI records for each SPG record. Note that the Fare periods must be contiguous and cover the entire range requested.

RecordSet: SFI (for XML) and sfi (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
EffDate (XML) effDate (JSON)	DATE	Y			Y	20060101	This field contains the date starting from which the Quoted Fare is valid. Format: YYYYMMDD
DisContDate (XML) disContDate (JSON)	DATE	Y			Y	200600331	This field contains the last departure date the Quoted Fare is valid. Format: YYYYMMDD
QuotedFare (XML) quotedFare (JSON)	NUM 10	N				500	This fare is for the individual trip. In Series, it is for each departure. This field is changed to optional for currency conversion. Either quoted fare or local fare must be provided in SFI. Please check on the 3.1.3.8 on maximum positive number 2147483647.
LocalFare (XML) localFare (JSON)	NUM 10	N				500	Fare being charged per person in Local Currency Code as defined above. If this field is provided, the exchange rate information must be available for the quoted fare conversion. Please check on the 3.1.3.8 on maximum positive number 2147483647.
SeasonIndicator (XML) seasonIndicator (JSON)	CHAR 05	N					Identification code meant to define a particular season associated to the defined Fare range.

3.1.2.4.2.4 Departure Information

This record contains departure/seat information for the pattern. There must be only one SDT record for each complete single group itinerary.

RecordSet: SDT (for XML) and sdt (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DptNum (XML) dptNum (JSON)	NUM 02	Y			Y	1	Departure number starting from 1.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
SeatsRqstd (XML) seatsRqstd (JSON)	NUM 03	Y				20	
SeatsPasses (XML) seatsPasses (JSON)	NUM 03	Y				0	Non-revenue tickets.
ProcessId (XML) processId (JSON)	NUM 10	N				1234567	This filed is designed for the special communication to the client. Currently, it will pass back through the confirmation file.
PnrLocator (XML) pnrLocator (JSON)	LOCATOR	N					This filed is designed specifically for the Kebut interface. Normal series request must not provide this information.
<SFG> (XML) "sfg" (JSON)		Y					Direction Information

3.1.2.4.2.5 Direction Information

This record contains departure/flight/itinerary information for the pattern.

RecordSet: SFG (for XML) and sfg (JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DirNum (XML) dirNum (JSON)	NUM 02	Y			Y	1	Direction number starting from 1. The outbound direction must be direction 1.
Orgn (XML) orgn (JSON)	CITY	Y				IAH	Boarding point.
Dstn (XML) dstn (JSON)	CITY	Y				FRA	Off point.
SumFareCase (XML) sumFareCase (JSON)	CHAR02	N				CW	Sum of marginal fares for each segment. If blank value or not providing the element, use Default set up in SysParms.
DenyBoardingFactor (XML) denyBoardingFactor (JSON)	CHAR 02	N					Factor used to load marginal fare according to Fight/date demand levels. If blank value or not providing the element, use Default set up in SysParms.
RqstdCmp (XML) rqstdCmp (JSON)	SYMBOL 02	Y	Compartment Cabin mapping			M	Compartment code identifying requested cabin.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
PrefClassCode (XML) prefClassCode (JSON)	SYMBOL 02	N				M	Preferred directional booking Class Code. Don't pass this field if there is no value.
PrefClassPOSCo de (XML) prefClassPOSCo de (JSON)	CHAR 10	N					Preferred directional booking Class POS. Don't pass this field if there is no value.
DptDate (XML) dptDate (JSON)	DATE	Y				20050831	Start Date for preferred travel. Format: YYYYMMDD
StartTime (XML) startTime (JSON)	TIME 04	Y				0000	Start Time for preferred travel. Format: 0000 – 2359
EndTime (XML) endTime (JSON)	TIME 04	Y				2359	End Time for preferred travel. Format: 0000 – 2359
ArrDptFlag (XML) arrDptFlag (JSON)	FLAG 01	Y				0	Indicates if Dates/Times advised above relate to Departure or Arrival. 1 = Arrival 0 = Departure (Default)
StopOverIndica tor (XML) stopOverIndica tor (JSON)	NUM 01	N				1	Each direction will have a Stop Over Indicator Flag. If the Flag is 1, then the Quoted Fare includes a Stop Over Cost for that direction. So G6 would need to take that into consideration during the calculation of Marginal Fares. Note that here the stop over means that the time between the 2 connecting flight is between 4 and 24 hours and the Group would like to stay in a hotel for that duration. (Do not confuse this with the way we are used to defining stop over – which usually means a new direction!).
StopOverCost (XML) stopOverCost (JSON)	NUM 10	N					This field will denote the Stop Over cost for that particular direction
<SFP> (XML) "sfp" (JSON)		N*					Request Segment information This segment information is required if the ORW setting (out_of_reservation_window) in pros.dtd is true.

3.1.2.4.2.6 Flight Information

This record contains Specific flight information for the pattern.

RecordSet: SFP (for XML) and sfp (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
SegNum (XML) segNum (JSON)	NUM 02	Y			Y	1	The range number within each direction will start from 1.
CrrCode (XML) crrCode (JSON)	CARRIER	Y				ZZ	Carrier Code
FlightNum (XML) flightNum (JSON)	FLIGHT 05	Y				441	Flight number
DptDate (XML) dptDate (JSON)	DATE	Y				20050831	Format: YYYYMMDD. Don't pass this field if there is no value.
SegOrgn (XML) segOrgn (JSON)	CITY	N				IAH	Travel Segment Origin. Group boarding point.. Don't pass this field if there is no value.
SegDstn (XML) segDstn (JSON)	CITY	N				FRA	Travel Segment Destination. Group off-boarding point. Don't pass this field if there is no value.
ClassCode (XML) classCode (JSON)	SYMBOL 02	N				M	Class Code. Currently, this field is reserved for the Kebut process. Don't pass this field if there is no value.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
SetNum (XML) setNum (JSON)	NUM 02	N				1	<p>This set number is used mainly for the ORW (booking outside of res window) module. By default, the set number will be 1. The set number will start from 1. This set number is used to group travel flights into a logical set. Different travel options can have different set of preferred flights.</p> <p>For example, flight 100 HOU-TPE as set 1. Flight 101 HOU-TPE as set 2. This example shows different preferred (set) options.</p> <p>Another example shows logical group of flights. Flight 102 HOU-TYO and flight 103 TYO-TPE will both be set 1. Flight 103 TYO-TPE will be the connecting flight for HOU-TPE trip.</p> <p>Although G6 can support preferred flight of many sets, we recommend that this set number can be limited to 3. More distinct set numbers in the loader file may subsequently increase the processing time.</p>

3.1.2.4.2.7 Note Information

There can be multiple Note records for each pattern block (i.e. for each SPG record). The Note record can be used to pass information such as OSI, SSR, etc.

RecordSet: Note (for XML) and note (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML) type (JSON)	CHAR 04	Y			Y	CTC	The identifier for note text. There is no restriction of unique note type.
Value (XML) value (JSON)	CHAR 256	Y					The text content

3.1.2.4.3 Process Rules

None

3.1.2.4.4 Loader Behavior

Insert/Update

3.1.2.4.5 Schema

The content of schema can be found at /config/interface/xsd/series.xsd file.

3.1.2.4.6 Examples

```
<?xml version="1.0" ?>
<SeriesLoad>
  <SHG>
    <RqstID>Group433</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <GroupName>U OF H GROUP</GroupName>
    <ProgramName>Summer Travel</ProgramName>
    <TourName>Excursion</TourName>
    <CustomerType>3</CustomerType>
    <AgencyIata>A987654321</AgencyIata>
    <OfficeCode>FRALH0860</OfficeCode>
    <AgencyName>Discount Travellers</AgencyName>
    <GroupType>S</GroupType>
    <PartialConfirmFlag>0</PartialConfirmFlag>
    <PreferredFlag>1</PreferredFlag>
  <SPG>
    <PattNum>1</PattNum>
    <CityPOS>JFK</CityPOS>
    <DistPOS>US</DistPOS>
    <MarketOrg>JFK</MarketOrg>
    <MarketDstn>DEL</MarketDstn>
    <CommPnct>0</CommPnct>
    <LCU>USD</LCU>
    <Note>
      <Type>CTC</Type>
      <Value> Boris Walden</Value>
    </Note>
    <Note>
      <Type>RCV</Type>
      <Value> Jurgen Singer </Value>
    </Note>
    <Note>
      <Type>SSR</Type>
      <Value> SSR value </Value>
    </Note>
    <Note>
      <Type>OSI</Type>
      <Value> OSI value</Value>
    </Note>
    <Note>
      <Type>IMP</Type>
      <Value>IMP value</Value>
    </Note>
    <Note>
      <Type>HLD</Type>
      <Value>HLD value</Value>
    </Note>
    <Note>
      <Type>STO</Type>
      <Value>This is a value to be stored in the Group Shell</Value>
    </Note>
    <Note>
      <Type>TXT</Type>
      <Value>This is a PNR Remark</Value>
    </Note>
  <SFI>
    <EffDate>20060201</EffDate>
```

```

        <DisContDate>20060215</DisContDate>
        <QuotedFare>600</QuotedFare>
        <LocalFare>600</LocalFare>
    </SFI>
    <SFI>
        <EffDate>20060216</EffDate>
        <DisContDate>20060228</DisContDate>
        <QuotedFare>640</QuotedFare>
        <LocalFare>640</LocalFare>
    </SFI>
    <SDT>
        <DptNum>1</DptNum>
        <SeatsRqstd>20</SeatsRqstd>
        <SeatsPasses>1</SeatsPasses>
        <SFG>
            <DirNum>1</DirNum>
            <Orgn>JFK</Orgn>
            <Dstn>DEL</Dstn>
            <SumFareCase></SumFareCase>
            <DenyBoardingFactor></DenyBoardingFactor>
            <RqstdCmp>M</RqstdCmp>
            <PrefClassCode></PrefClassCode>
            <PrefClassPOSCode></PrefClassPOSCode>
            <DptDate>20060203</DptDate>
            <StartTime>0800</StartTime>
            <EndTime>0600</EndTime>
            <ArrDptFlag>0</ArrDptFlag>
        <SFP>
            <SegNum>1</SegNum>
            <CrrCode>ZZ</CrrCode>
            <FlightNum>00133</FlightNum>
            <DptDate>20060203</DptDate>
            <SetNum>1</SetNum>

        </SFP>
        <SFP>
            <SegNum>2</SegNum>
            <CrrCode>ZZ</CrrCode>
            <FlightNum>00190</FlightNum>
            <DptDate>20060203</DptDate>
            <SetNum>2</SetNum>    // if SetNum is 1, then flight 190 is the
                                connecting flight of flight 133. If SetNum is 2, then flight is on
                                the same market as flight 133. SetNum 2 represents a different
                                option of the same market.

        </SFP>
    </SFG>
</SDT>
</SPG>
</SHG>
</SeriesLoad>

```

3.1.2.4.7 Series JSON load via series request loader

End point: **/group/rest/submitSeriesRequest**

Example: <http://localhost:8080/group/rest/submitSeriesRequest>

3.1.2.4.8 Example Series JSON content for series rest loader

```

{
  "shg": {

```

```

"rqstID": "STEST9",
"outstationID": "homeoffic",
"requestDate": "20180606",
"requestTime": "1737",
"groupName": "ABC",
"customerType": 1,
"agencyIata": "8627532",
"agencyName": ": AL MASAOOD TRAVEL",
"groupType": "S",
"partialConfirmFlag": 0,
"preferredFlag": 0,
"agentURL": "http://localhost:8090/groupagent/rest/",
"spg": [{
  "pattNum": 1,
  "cityPOS": "AUH",
  "distPOS": "AE",
  "marketOrg": "COK",
  "marketDstn": "DOH",
  "commPnct": 0,
  "lcu": "ABC",
  "tripType": "OW",
  "note": [{
    "type": "TXT",
    "value": "SAMPLE"
  }],
  {
    "type": "TXT",
    "value": "RP/PGKGA0101/PGKGA0101"
  },
  {
    "type": "TXT",
    "value": "SAMPLE1"
  }
],
"sfi": [{
  "effDate": "20180531",
  "disContDate": "20180531",
  "quotedFare": 3.0,
  "localFare": 2.0
}],
"sdt": [{
  "dptNum": 1,
  "seatsRqstd": 10,
  "seatsPasses": 0,
  "sfg": [{
    "dirNum": 1,
    "orgn": "COK",
    "dstn": "DOH",
    "rqstdCmp": "Y",
    "dptDate": "20180531",
    "startTime": "0000",
    "endTime": "2359",
    "arrDptFlag": 0,
    "sfp" [{
      "segNum": 1,
      "crrCode": "ZZ",
      "flightNum": "123",
      "dptDate": "20181231"
    }
  ]
  }
  }
],
{
  "pattNum": 2,

```

```

"cityPOS": "AUH",
"distPOS": "AE",
"marketOrg": "COH",
"marketDstn": "DOK",
"commPnct": 0,
"lcu": "USD",
"tripType": "RT",
"sfi": [{
  "effDate": "20181231",
  "disContDate": "20190131",
  "quotedFare": 1.79,
  "localFare": 2.0
}],
"sdt": [{
  "dptNum": 1,
  "seatsRqstd": 10,
  "seatsPasses": 0,
  "sfg": [{
    "dirNum": 1,
    "orgn": "COH",
    "dstn": "DOK",
    "rqstdCmp": "Y",
    "dptDate": "20181231",
    "startTime": "0000",
    "endTime": "2359",
    "arrDptFlag": 0,
    "sfp": [{
      "segNum": 1,
      "crrCode": "QR",
      "flightNum": "00515",
      "dptDate": "20181231",
      "segOrgn": "COK",
      "segDstn": "DOH"
    }]
  }],
},
{
  "dirNum": 2,
  "orgn": "DOK",
  "dstn": "COH",
  "rqstdCmp": "Y",
  "dptDate": "20190131",
  "startTime": "0000",
  "endTime": "2359",
  "arrDptFlag": 0,
  "sfp": [{
    "segNum": 1,
    "crrCode": "QR",
    "flightNum": "00516",
    "dptDate": "20190131",
    "segOrgn": "DOK",
    "segDstn": "COH"
  }]
}]
},
{
  "dptNum": 2,
  "seatsRqstd": 10,
  "seatsPasses": 0,
  "sfg": [{
    "dirNum": 1,
    "orgn": "COH",
    "dstn": "DOK",
    "rqstdCmp": "Y",

```



```

        "dptDate": "20190128",
        "startTime": "0000",
        "endTime": "2359",
        "arrDptFlag": 0,
        "sfp": [{
            "segNum": 1,
            "crrCode": "QR",
            "flightNum": "00515",
            "dptDate": "20190128",
            "segOrgn": "COK",
            "segDstn": "DOH"
        }]
    },
    {
        "dirNum": 2,
        "orgn": "DOK",
        "dstn": "COH",
        "rqstdCmp": "Y",
        "dptDate": "20190228",
        "startTime": "0000",
        "endTime": "2359",
        "arrDptFlag": 0,
        "sfp": [{
            "segNum": 1,
            "crrCode": "QR",
            "flightNum": "00516",
            "dptDate": "20190228",
            "segOrgn": "DOK",
            "segDstn": "COH"
        }]
    }
}

```

3.1.2.5 *Reject Request Load*

3.1.2.5.1 **Description**

The Reject loader is a non-interactive program to load the Reject requests into the database. The Reject requests are in a XML file given to the loader. The loading program also will delete this request in the request queue. In addition, the loading program will update the request report with the reason for rejection and set the rejected flag. This Reject loader is only used for the Group Agent user to reject the request during the negotiation process. However, the same loader can be used as a general purpose tool to reject a non-confirmed request. It is the Group user's responsibility to make sure that the request stage of the request is appropriate for rejection. For example, a series request with PNRGen failed stage is not appropriate for the rejection. It is due to the reason that some departures may have successfully finished the PNR generation process even some other departures may have failed.

The PROS Group System will accept whatever data is passed to it. If the request file has the necessary data (correct or incorrect) and is formatted correctly, it will be loaded. In the case that the corruption was to the formatting or so severe that the request is not loadable, it will not be loaded. It is the Airlines' responsibility to create the clean load file and put it in the data directory.

3.1.2.5.2 Data Fields

3.1.2.5.2.1 Request Header

This record contains general request level information. There will be one RJG record for each request.

RecordSet: RJG (for XML) and rjg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML) rqstID (JSON)	CHAR 10	Y			Y	Group433	Unique Reference Number used for identifying a Group Request application.
OutstationID (XML) outstationID (JSON)	CHAR 09	Y			Y	OUT11	Airlines Outstation/Sales office where request originates from.
RequestDate (XML) requestDate (JSON)	DATE	Y			Y	20050930	Date group booking request submitted to G6. Format: YYYYMMDD
RequestTime (XML) requestTime (JSON)	TIME 04	Y			Y	1130	Time group booking request submitted to G6. Format: 0000 – 2359
<Note> (XML) "note" (JSON)		Y					Reject Note information

3.1.2.5.2.2 Note Information

There can be only one Note record for each request. The Note record can be used to pass information on the reason for rejection.

RecordSet: Note (for XML) and note (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML) type (JSON)	CHAR 04	Y			Y	REJ	The reject note identifier. Use REJ for the rejection.
Value (XML) value (JSON)	CHAR 256	Y					The text content for rejection

3.1.2.5.1 Process Rules

None

3.1.2.5.2 Loader Behavior

Insert/Update

3.1.2.5.3 Schema

The content of schema can be found at /config/interface/xsd/reject.xsd file.

3.1.2.5.4 Examples

```
<?xml version="1.0" ?>
<RejectLoad>
  <RJG>
    <RqstID>Group433</RqstID>
```

```

<OutstationID>OUT11</OutstationID>
<RequestDate>20050930</RequestDate>
<RequestTime>1130</RequestTime>
<Note>
  <Type>REJ</Type>
  <Value>This request is rejected by travel agent John due to the low offer
    fare</Value>
</Note>
</RJG>
</RejectLoad>

```

3.1.2.5.5 Reject Json load via Reject rest loader

Endpoint: **/group/rest/submitRejectRequest**

Example: <http://localhost:8060/group/rest/submitRejectRequest>

3.1.2.5.6 Example reject JSON content for Reject rest loader

```

{
  "rjg":{
    "rqstID":"A1094",
    "outstationID":"homeoffic",
    "requestDate":"20180618",
    "requestTime":"1508",
    "note":{
      "type":"REJ",
      "value":"rejected with some reason"
    }
  }
}

```

System Outputs

3.1.3 Output Dataset Record Definitions

The system will produce the following datasets. More details can be found in the section below for each of the data outputs.

3.1.3.1 Negotiation

3.1.3.1.1 Description

The negotiation module has a temporary holding file where the alternative options are stored by the PROS Group System until they are sent back to the Outstation for review. Unlike other queues in the Group System, the negotiation module generates an external file, which is picked up by Airlines' interface so that the contents can be sent to the Mask. The name of the file generated is "RequestID"_HLD.xml, and it contains all of the alternative options for one group request. The file is generated in the directory from which the Group System was started. Please note that as the file is processed by Airline's interface, it is not removed from the directory where was generated

3.1.3.1.2 Data Fields

This record contains general request level information. There will be one HHG record for each request.

DatasetName: HoldingOption

RecordSet: HHG (for XML) and hhg (for JSON response)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
------------	--------	-------	-------------	----------	----	---------	--------------------

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML) rqstID (JSON)	CHAR 10	Y				Group433	Unique Reference Number used for identifying a Group Request application.
OutstationID (XML) outstationID (JSON)	CHAR 09	Y				OUT11	Airlines Outstation/Sales office where request originates from.
RequestDate (XML) requestDate (JSON)	DATE	Y				20050930	Date group booking request submitted to G6. Format: YYYYMMDD
RequestTime (XML) RequestTime (JSON)	TIME 04	Y				1130	Time group booking request submitted to G6. Format: 0000 – 2359
GroupName (XML) groupName (JSON)	CHAR 50	Y				U OF H GROUP	Name of the group for use in PNR Creation.
CustomerType (XML) CustomerType (JSON)	NUM 10	Y	Customer type			3	Number used to identify category type (e.g.: Leisure, Cruise, Sports, etc.)
AgencyIata (XML) agencyIata (JSON)	CHAR 10	N	Agency			A987654321	GDS or other Airlines IATA reference. Don't pass this field if there is no value.
OfficeCode (XML) officeCode (JSON)	CHAR 10	N	Agency			FRALH0860	Office Code. Either IATA or Office Code must exist. Don't pass this field if there is no value.
AgencyName (XML) agencyName (JSON)	CHAR 50	N	Agency			Discount Travelers	GDS or other Airlines Name. Don't pass this field if there is no value.
GroupType (XML) groupType (JSON)	CHAR 02	Y				A	A = Ad hoc S = Series
CityPOS (XML) cityPOS (JSON)	CITY	N				IAH	Departure Airport for the City where the request originated. If blank, will use info from Agency table. In case of new Agency IATA, this field will populate the City POS field in the Agency table in G6. Don't pass this field if there is no value.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CommPnct (XML) commPnct (JSON)	NUM 02	Y				0	Agent commission percentage. Must be a whole number.
SeatsRqstd (XML) seatsRqstd (JSON)	NUM 03	Y				20	
SeatsPasses (XML) seatsPasses (JSON)	NUM 03	Y				0	Non-revenue tickets.
SeatsExp (XML) seatsExp (JSON)	NUM 03	Y				16	Seats expected.
MinSeatRqstd (XML) minSeatRqstd (JSON)	NUM 03	N				20	This value will be used only if Passenger negotiation is set (NegoFlag) Its value can only be smaller than the seats requested. If this value is not passed and the NegoFlag is set to Passenger (4), the request will be rejected.
QuotedFare (XML) quotedFare (JSON)	NUM 10	Y				500	Fare originally quoted for the request
RealFare (XML) realFare (JSON)	NUM 10	N				500	Fare accepted in the G6 for the request. By default, it has the same value as quoted fare. Don't pass this field if there is no value.
NegoFlag (XML) negoFlag (JSON)	NUM 01	Y				1	1: Flight negotiation 2: Fare negotiation (mainly for the preferred flight) 4: Passenger negotiation (mainly for the preferred flight) 3: Fare and Flight negotiation (mainly for the preferred flight)
UtlRate (XML) utlRate (JSON)	NUM 03	Y				80	Utilization rate
ProgramName (XML) programName (JSON)	CHAR 50	N					Program name

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
LocalFare (XML) localFare (JSON)	NUM 10	N				500	Fare being charged per person in Local Currency
<HFG> (XML) "hfg" (JSON)		Y					Direction information
<Note> (XML) "note" (JSON)		Y					Note information

3.1.3.1.2.1 Direction Information

The HFG record identifies the direction that is being held; therefore there can be only one record for each requested direction.

RecordSet: HFG (for XML) and hfg (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DirNum (XML) dirNum (JSON)	NUM 02	Y				1	Direction number starting from 1. The outbound direction must be direction 1.
Orgn (XML) orgn (JSON)	CITY	Y				IAH	Direction origin
Dstn (XML) dstn (JSON)	CITY	Y				FRA	Direction destination
SumFareCase (XML) sumFareCase (JSON)	CHAR 02	Y				CW	Sum of marginal fares for each segment. The Sum Fare information will be populated either from the request information or the system default.
DenyBoardingFactor (XML) denyBoardingFactor (JSON)	CHAR 02	Y					Factor used to load marginal fare according to Flight/date demand levels. The Denied Boarding information will be populated either from the request information or the system default.
RqstdCmp (XML) rqstdCmp (JSON)	SYMBOL 02	Y				M	Compartment code identifying requested cabin.
TripDuration (XML) tripDuration (JSON)	NUM 03	N				5	Trip duration number. The number not applies to the first direction. If there is not value, do not send this attribute out.
LocalFare (XML) localFare (JSON)	NUM 10	N				500	Fare being charged per person in Local Currency.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
<HFO> (XML)		Y					Option information
"hfo" (JSON)							

3.1.3.1.2.2 Note Information

RecordSet: Note (for XML) and note (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML)	CHAR 04	Y			Y	CTC	The identifier for note text. There is no restriction of unique note type.
type (JSON)							
Value (XML)	CHAR 256	Y					The text content
value (JSON)							

3.1.3.1.2.3 Option Information

The HFO record contains information on the option(s) offered for a direction. Since there can be one HFO record for each option offered and it is possible to offer multiple options, the file can contain multiple HFO records.

RecordSet:HFO (for XML) and hfo (for JSON)

Data Field	Format	Rq'd	Referential	Validity	PK	Example	Description / Note
OptID (XML)	NUM 04	Y				1	Option ID.
optID (JSON)							
SubOptID (XML)	NUM 04	Y				1	Sub Option ID. When Sub Option is not the same with Option ID, it indicates option break up.
subOptID (JSON)							
DptDate (XML)	DATE	Y				20051031	Departure Date
dptDate (JSON)							
DptTime (XML)	TIME 04	Y				1030	Departure Time
dptTime (JSON)							
ArrTime (XML)	TIME 04	Y				1930	Arrival Time
arrTime (JSON)							
ArrDayOffset (XML)	NUM 02	N					0: If the arrival date and departure date are the same. 1: If the arrival date is one day after the departure date. 2: If the arrival date is two days after the departure date.
arrDayOffset (JSON)							
SegOrgn (XML)	CITY	Y				FRA	Segment Origin
segOrgn (JSON)							
SegDstn (XML)	CITY	Y				JFK	Segment Destination
segDstn (JSON)							
NormAvail (XML)	NUM 03	Y				125	Normalized availability
normAvail (JSON)							

Data Field	Format	Rq'd	Referential	Validity	PK	Example	Description / Note
SeatsRqstd (XML) seatsRqstd (JSON)	NUM 03	Y				100	Seat requested for this option.
MargFare (XML) margFare (JSON)	NUM 10	Y				500	Marginal fare
CmpCode (XML) cmpCode (JSON)	SYMBOL 02	N				M	Highest Compartment code from flights.
ClassCode (XML) classCode (JSON)	SYMBOL 02	Y				M	Class symbol for this option associated with Highest Compartment code
OptSelected (XML) optSelected (JSON)	NUM 01	Y				1	1 = Selected
ClassPOS (XML) classPOS (JSON)	CHAR 10	N				M	
RealFare (XML) realFare (JSON)	NUM 10	Y					Real fare
FlightInfo (XML) flightInfo (JSON)	CHAR 128	Y					Carrier code and flight number. If option has more than one flight then each flight info will be separated by '/' symbol.
ConnectionCities (XML) connectionCities (JSON)	CHAR 11	N					If option has more than one flights then the connection city(s) are listed here separated by '/' symbol
PreferredOption (XML) preferredOption (JSON)	Flag 01	N				1	1: This option contains preferred flight. 0: no preferred flight in this option.
LocalFare (XML) localFare (JSON)	NUM 10	N				500	Fare in Local Currency.
<HFF> (XML) "hff" (JSON)		Y					Segment information

3.1.3.1.2.4 Option Segment/Leg Information

There can be multiple HFF records. Each record contains the information for each traveled flight segment (segment control carriers) constituting each itinerary option. Most of the fields are provided except the ExpEmpty (not available and thus 0 for the leg control carriers). For the leg inventory control carriers, the leg will replace segment information. Each flight/leg will have one HFF record.

RecordSet: HFF (for XML) and hff (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
CrrCode (XML) crrCode (JSON)	CARRIER	Y				ZZ	Carrier Code
FlightNum (XML) flightNum (JSON)	FLIGHT 05	Y				441	Flight number
DptDate (XML) dptDate (JSON)	DATE	Y				20051031	Format: YYYYMMDD.
SegOrgn (XML) segOrgn (JSON)	CITY	Y				IAH	Travel Segment Origin for segment control carriers. Travel Leg Origin for the leg inventory control carriers.
SegDstn (XML) segDstn (JSON)	CITY	Y				FRA	Travel Segment Destination for segment control carriers. Travel Leg Destination for the leg inventory control carriers.
DptTime (XML) dptTime (JSON)	TIME 04	Y				1030	Departure Time
ArrTime (XML) arrTime (JSON)	TIME 04	Y				1930	Arrival Time
ActAvail (XML) actAvail (JSON)	NUM 03	Y				125	Actual availability
NormAvail (XML) normAvail (JSON)	NUM 03	Y				125	Normalized availability
ExpEmpty (XML) expEmpty (JSON)	NUM 03	Y				10	Segment expected empty.
TotalBook (XML) totalBook (JSON)	NUM 03	Y				200	Segment total book
GrpBook (XML) grpBook (JSON)	NUM 03	Y				100	Segment group book

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
MargFare (XML) margFare (JSON)	NUM 10	Y				1	Marginal fare
InProsFlag (XML) inProsFlag (JSON)	FLAG 01	Y					1= Flight is contained in the PROS database (default) 0 = Flight is not contained in the PROS database
ClassCode (XML) classCode (JSON)	SYMBOL 02	N				M	Class symbol for this flight
ClassPOS (XML) classPOS (JSON)	CHAR 10	N				ALL	Class Point of Sale

3.1.3.1.3 Process Rules

None

3.1.3.1.4 Loader Behavior

None

3.1.3.1.5 Schema

The content of schema can be found at /config/interface/xsd/nego.xsd file.

3.1.3.1.6 Examples

```
<?xml version="1.0" ?>
<HoldingOption>
  <HHG>
    <RqstID>Group433</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <GroupName>U OF H GROUP</GroupName>
    <CustomerType>3</CustomerType>
    <AgencyIata>A987654321</AgencyIata>
    <OfficeCode>FRALH0860</OfficeCode>
    <AgencyName>Discount Travellers</AgencyName>
    <GroupType>A</GroupType>
    <CityPOS>IAH</CityPOS>
    <CommPnt>0</CommPnt>
    <SeatsRqstd>20</SeatsRqstd>
    <SeatsPasses>0</SeatsPasses>
    <SeatsExp>0</SeatsExp>
    <MinSeatRqstd> 20</MinSeatRqstd>
    <QuotedFare>500</QuotedFare>
    <RealFare>500</RealFare>
    <NegoFlag>1</NegoFlag>
    <UtlRate>70</UtlRate>
    <Note>
      <Type>CTC</Type>
    </Note>
  </HHG>
</HoldingOption>
```

```

    <Value> Boris Walden</Value>
</Note>
<Note>
    <Type>RCV</Type>
    <Value> Jurgen Singer </Value>
</Note>
<Note>
    <Type>SSR</Type>
    <Value> SSR value </Value>
</Note>
<Note>
    <Type>OSI</Type>
    <Value> OSI value</Value>
</Note>
<Note>
    <Type>IMP</Type>
    <Value>IMP value</Value>
</Note>
<Note>
    <Type>HLD</Type>
    <Value>HLD value</Value>
</Note>
<Note>
    <Type>STO</Type>
    <Value>This is a value to be stored</Value>
</Note>
<Note>
    <Type>TXT</Type>
    <Value>This is a PNR Remark</Value>
</Note>
<HFG>
    <DirNum>1</DirNum>
    <Orgn>JFK</Orgn>
    <Dstn>DEL</Dstn>
    <SumFareCase>SF</SumFareCase>
    <DenyBoardingFactor>DB</DenyBoardingFactor>
    <RqstdCmp>M</RqstdCmp>
<HFO>
    <OptID>1</OptID>
    <SubOptID>1</SubOptID>
    <DptDate>20050913</DptDate>
    <DptTime>1030</DptTime>
    <ArrTime>0400</ArrTime>
    <SegOrgn>LHR</SegOrgn>
    <SegDstn>JFK</SegDstn>
    <NormAvail>50</NormAvail>
    <SeatsRqstd>25</SeatsRqstd>
    <MargFare>550</MargFare>
    <ClassCode>Y</ClassCode>
    <OptSelected>1</OptSelected>
    <ClassPOS>USA</ClassPOS>
    <RealFare>600</RealFare>
    <FlightInfo>ZZ132/ZZ133</FlightInfo>
    <ConnectionCities>LHR</ConnectionCities>
    <HFF>
        <CrrCode>ZZ</CrrCode>
        <FlightNum>132</FlightNum>

```

```

        <DptDate>20050913</DptDate>
        <SegOrgn>JFK</SegOrgn>
        <SegDstn>LHR</SegDstn>
        <DptTime>1030</DptTime>
        <ArrTime>0600</ArrTime>
        <ActAvail>50</ActAvail>
        <NormAvail>50</NormAvail>
        <ExpEmpty>35</ExpEmpty>
        <TotalBook>180</TotalBook>
        <GrpBook>30</GrpBook>
        <MargFare>550</MargFare>
        <InProsFlag>1</InProsFlag>
        <ClassCode>G</ClassCode>
    </HFF>
    <HFF>
        <CrrCode>ZZ</CrrCode>
        <FlightNum>133</FlightNum>
        <DptDate>20050914</DptDate>
        <SegOrgn>LHR</SegOrgn>
        <SegDstn>DEL</SegDstn>
        <DptTime>1200</DptTime>
        <ArrTime>0400</ArrTime>
        <ActAvail>72</ActAvail>
        <NormAvail>72</NormAvail>
        <ExpEmpty>48</ExpEmpty>
        <TotalBook>160</TotalBook>
        <GrpBook>43</GrpBook>
        <MargFare>480</MargFare>
        <InProsFlag>1</InProsFlag>
        <ClassCode>G</ClassCode>
    </HFF>
</HFO>
</HFG>
</HHG>
</HoldingOption>

```

3.1.3.1.7 Json output for Offer/Negotiation loader in GroupAgent(MASK)

Mask Endpoint to load the offer: **/groupagent/rest/offerRequest**

Exmple Mask endpoint: <http://localhost:8090/groupagent/rest/offerRequest>

3.1.3.1.8 Offer JSON output example

```

{
  "hhg": {
    "rqstID": "A756295",
    "outstationID": "homeoffic",
    "requestDate": "20180628",
    "requestTime": "1536",
    "groupName": "TEST",
    "customerType": "2",
    "agencyIata": "38519644",
    "agencyName": "AAA",
    "groupType": "A",
    "cityPOS": "CDG",
    "commPnct": "0",
    "seatsRqstd": "10",
    "seatsPasses": "0",

```

```

"seatsExp": "10",
"minSeatRqstd": "0",
"quotedFare": "0",
"realFare": "1000",
"negoFlag": "3",
"utlRate": "100",
"localFare": "7",
"note": [{
    "type": "RCV",
    "value": "rejuu"
}],
{
    "type": "NEG",
    "value": "Default negotiation message from UI"
}],
"hfg": [{
    "dirNum": "1",
    "orgn": "CDG",
    "dstn": "DOH",
    "sumFareCase": "CW",
    "denyBoardingFactor": "Y",
    "rqstdCmp": "Y",
    "localFare": "7",
    "hfo": [{
        "optID": "1",
        "subOptID": "1",
        "dptDate": "20181212",
        "dptTime": "2120",
        "arrTime": "0540",
        "arrDayOffset": "1",
        "segOrgn": "CDG",
        "segDstn": "DOH",
        "normAvail": "263",
        "seatsRqstd": "10",
        "margFare": "44",
        "cmpCode": "Y",
        "classCode": "G",
        "optSelected": "1",
        "realFare": "1000",
        "flightInfo": "QR00038",
        "localFare": "7",
        "hff": [{
            "crrCode": "QR",
            "flightNum": "00038",
            "dptDate": "20181212",
            "segOrgn": "CDG",
            "segDstn": "DOH",
            "dptTime": "2120",
            "arrTime": "0540",
            "actAvail": "209",
            "normAvail": "209",
            "expEmpty": "197",
            "totalBook": "0",
            "grpBook": "26",
            "margFare": "44",
            "inProsFlag": "1",
            "classCode": "G"
        }]
    }]
}]
}

```

3.1.3.2 Confirmation/Rejection (Deprecated)

This record structure is deprecated and will be removed in a future release. It will be replaced by the new Confirmation/Rejection record structure defined in 3.1.3.3.

3.1.3.2.1 Description

PROS Group System provides the ability to send the confirmation information to the original requester when the group request has been accepted. In similar manner, the PROS Group System will allow the user to send a rejection remark to the requested party. Only one confirmation or rejection message is allowed per request.

3.1.3.2.2 Data Fields

This REQ record contains the Request ID to be able to reference the message to the appropriate request.

RecordSet: REQ

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID	CHAR 10	Y				1011000530	Request ID
OutstationID	CHAR 09	N				OUT11	Outstation ID. Don't pass this field if there is no value.
RequestDate	DATE	N				20050930	Request Date. Don't pass this field if there is no value.
RequestTime	TIME 04	N				1130	Request Time. Don't pass this field if there is no value.
<Note>		N					Note information. Don't pass this field if there is no value.
<Loc>		N					Locator information. This information is provided only when the request is confirmed. Don't pass this field if there is no value.

3.1.3.2.2.1 Note Data Fields

This record is the message sending back to the mask system. It is optional.

RecordSet: Note

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type	CHAR 04	Y				RJT CFM, ...TXT	RJT : the rejection (set as the default and can be modified) CFM: confirmation (Set as default and can be modified) TXT and other possible note message can be passed back to the outstations. A reserved ERR is to indicate any error message provided by G6.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Value	CHAR 255	N				Example1. Thank you for your business. Example2. Not enough Quoted Fare.	The message going out to the outstations. Don't pass this field if there is no value.

3.1.3.2.2 Locator Data Fields

If this is a confirmation message, this Loc record will contain PNR Locator information. In case of rejection this record may be omitted.

RecordSet: Loc

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
PNRLocator	LOCATOR	Y				AAAAAA2005 0930	PNR Locator
PttSequence	NUM 02	N				1	Series only
DptSequence	NUM 03	N					Series Only
BkgStatus	SYMBOL 02	N					Series Only
ProcessId	NUM 10	N					Process ID sent back to the client.
GroupShellID	NUM 38	N					This field is designed specifically for the Kebut interface.

3.1.3.2.3 Term Data Fields

The data fields contain necessary to support terms and conditions.

RecordSet: TERMS

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Id	NUM 38	N					Either Group shell ID or Series ID
MaxGrpSizeTot	NUM 04	Y					Allocations Total Group Size/Max as per Deal Note
ClassCode	SYMBOL 02	Y					Booking Class AS per request
LocalFare	NUM 10	Y					Net Fare As per Deal Code Message Net Fare
FareBasis	CHAR 8	Y					FARE BASIS As per Deal Note

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
DealDaysPrior	Num 04	Y					From Date of Deal to TTL. Here the TTL is assumed to be the first valid date in TTL. If Deal is done of Jan 1, 2007 and Ticketing Time Limit for deposit is 30 days prior, this value will be 30.
TravelDaysPrior	NUM 04	Y					TRAVEL VALIDITY From 1 st travel date to last travel date. Difference between the departure date of first direction and the departure date of last direction. So for 1 direction Group Request, this can be 0.
MinGrpSizeTot	NUM 04	Y					Minimum 104equested104n (Allocations) Total Group Size/Min as per Deal Note
Deposit	NUM 10	Y					Deposit 25% of total group fare
MinGrpSizeFlt	NUM 04	Y					Minimum 104tilization per flight As per Deal Code Message Min Group Size per flight
DepositDeadlineDate	DATE	Y					Release Period if deposit not paid. 8 days after PNR confirmation
NamesDeadlineDate	DATE	Y					Deadline for names. AS per G6 Name Time Line
TtlDate	DATE	Y					Ticketing time limit. As per G6 TTL
StopOvrCost	NUM 10	Y					STPC
StopOver	CHAR 11	Y					TRAVEL VALIDITY
Endorsement	CHAR 11	Y					Endorsement

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
FareBox	CHAR 11	Y					Fare box
Commission	CHAR 11	Y					Commission
Application	CHAR 11	Y					Application
SalesRestrictions	CHAR 11	Y					Sales restrictions
Reservations	CHAR 11	Y					Reservations
Combinations	CHAR 11	Y					Combinations
SideTrips	CHAR 11	Y					Sidetrips
Transfers	CHAR 11	Y					Transfers
ReservationChange	CHAR 11	Y					Change of reservation
NameChangePre	CHAR 11	Y					Name change before ticketing
NameChangePost	CHAR 11	Y					Name change after ticketing
LostTicketFee	CHAR 11	Y					Lost ticket fee
CancellationFee	CHAR 11	Y					Cancellation/Refund
NoShowFee	CHAR 11	Y					No show fee
ChildFare	CHAR 11	Y					Child fare
InfantFare	CHAR 11	Y					Infant fare

3.1.3.2.3 Processing Rules

None

3.1.3.2.4 Output Behavior

None.

3.1.3.2.5 Schema

The content of schema can be found at /config/interface/xsd/confrej.xsd file.

3.1.3.2.6 Example (Confirmation)

```
<?xml version="1.0" ?>
<Reply>
  <REQ>
    <RqstID>1011000530</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <Note>
      <Type>CTC</Type>
      <Value> Boris Walden</Value>
    </Note>
    <Note>
```

```

        <Type>RCV</Type>
        <Value> Jorgen Singer </Value>
    </Note>
    <Note>
        <Type>TXT</Type>
        <Value>We appreciate your business.</Value>
    </Note>
    <Loc>
        <PNRLocator>AAAAAA20050930</PNRLocator>
    </Loc>
    <Loc>
        <PNRLocator>BBBBBB20050930</PNRLocator>
    </Loc>
</REQ>
</Reply>

```

3.1.3.2.7 Example (Rejection)

```

<?xml version="1.0" ?>
<Reply>
    <REQ>
        <RqstID>1011000530</RqstID>
        <OutstationID>OUT11</OutstationID>
        <RequestDate>20050930</RequestDate>
        <RequestTime>1130</RequestTime>
        <Note>
            <Type>CTC</Type>
            <Value> Boris Walden</Value>
        </Note>
        <Note>
            <Type>RCV</Type>
            <Value> Jorgen Singer </Value>
        </Note>
        <Note>
            <Type>TXT</Type>
            <Value>Not enough Quoted Fare.</Value>
        </Note>
    </REQ>
</Reply>

```

3.1.3.3 Confirmation/Rejection

3.1.3.3.1 Description

PROS Group System provides the ability to send the confirmation information to the original requester when the group request has been accepted. In similar manner, the PROS Group System will allow the user to send a rejection remark to the requested party. Only one confirmation or rejection message is allowed per request.

3.1.3.3.2 Data Fields

This REQ record contains the Request ID to be able to reference the message to the appropriate request.

RecordSet: REQ (for XML) and req (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
RqstID (XML)	CHAR 10	Y				1011000530	Request ID
rqstID (JSON)							

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
OutstationID (XML) outstationID (JSON)	CHAR 09	N				OUT11	Outstation ID. Don't pass this field if there is no value.
RequestDate (XML) requestDate (JSON)	DATE	N				20050930	Request Date. Don't pass this field if there is no value.
RequestTime (XML) requestTime (JSON)	TIME 04	N				1130	Request Time. Don't pass this field if there is no value.
<Note> (XML) "note" (JSON)		N					Note information. Don't pass this field if there is no value.
<AdHoc> (XML) "adhoc" (JSON)		N					AdHoc information. There can be only one of these. Only AdHoc or Pattern can be defined, not both.
<Pattern> (XML) "pattern" (JSON)		N					Pattern information for Series Requests. Can have more than one pattern per Series. Only AdHoc or Pattern can be defined, not both.

3.1.3.3.2.1 Note Data Fields

This record is the message sending back to the mask system. It is optional.

RecordSet: Note (for XML) and note (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Type (XML) type (JSON)	CHAR 04	Y				RJT CFM, ...TXT	RJT : the rejection (set as the default and can be modified) CFM: confirmation (Set as default and can be modified) TXT and other possible note message can be passed back to the outstations. A reserved ERR is to indicate any error message provided by G6.
Value (XML) value (JSON)	CHAR 255	N				Example1. Thank you for your business. Example2. Not enough Quoted Fare.	The message going out to the outstations. Don't pass this field if there is no value.

3.1.3.3.2.2 Pattern Data Fields

This will contain the data for the AdHoc Request that is being confirmed. This data will include the Locators and Terms if any.

RecordSet: Pattern (for XML) and pattern (for JSON)

Attributes (only for XML)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
pttnSequence (only for XML)	NUM 02	Y				1	The pattern number in the series. For XML response, this field comes as attribute for Patten.

Elements

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
pttnSequence (only for JSON)	NUM 02	Y				1	The pattern number in the series. For JSON response, this field comes under pattern, but not as attribute
<Loc> (XML) "loc" (JSON)		Y					Locator information. This information is provided only when the request is confirmed. Don't pass this field if there is no value.

3.1.3.3.2.3 AdHoc Data Fields

This will contain the data for the AdHoc Request that is being confirmed. This data will include the Locators and Terms if any.

RecordSet: AdHoc (for XML) and adHoc (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
<Loc> (XML) "loc" (JSON)		Y					Locator information. This information is provided only when the request is confirmed. Don't pass this field if there is no value.

3.1.3.3.2.4 Locator Data Fields

If this is a confirmation message, this Loc record will contain PNR Locator information. In case of rejection this record may be omitted.

RecordSet: Loc (for XML) and loc (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
PNRLocator (XML) pnrLocator (JSON)	LOCATOR	Y				AAAAAAA2005 0930	PNR Locator
DptSequence (XML) dptSequence (JSON)	NUM 03	Y/N					Required for Series, leave blank for AdHoc
BkgStatus (XML) bkgStatus (JSON)	SYMBOL 02	Y/N					Required for Series, leave blank for AdHoc
ProcessId (XML) processId (JSON)	NUM 10	N					Process ID sent back to the client.
GroupShellID (XML) groupShellID (JSON)	NUM 38	N					This field is designed specifically for the Kebut interface.
<Terms> (XML) "terms" (JSON)		N					Optional list of Terms and Conditions

3.1.3.3.2.5 Terms and Conditions field

This is the list of terms and conditions.

RecordSet: Terms (for XML) and terms (for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
<Term> (XML) "term" (JSON)	CHAR 255	Y					Each Term or Condition will have one <Term> entry.

Term attributes (only for XML)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
key	CHAR 32	Y					Key for a Term or Condition

RecordSet: term (only for JSON)

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
key	CHAR 32	Y				Fare Basis	Key for a Term or Condition

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
value	CHAR 255	Y				JFRG00F	Value for a term or condition

3.1.3.3.3 Processing Rules

None

3.1.3.3.4 Output Behavior

None.

3.1.3.3.5 Schema

The content of schema can be found at /config/interface/xsd/confirmreject.xsd file.

3.1.3.3.6 Example (AdHoc Confirmation) (XML based confirmation)

```
<?xml version="1.0" ?>
<Reply>
  <REQ>
    <RqstID>1011000530</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <Note>
      <Type>CTC</Type>
      <Value> Boris Walden</Value>
    </Note>
    <Note>
      <Type>RCV</Type>
      <Value> Jorgen Singer </Value>
    </Note>
    <Note>
      <Type>TXT</Type>
      <Value>We appreciate your business.</Value>
    </Note>
    <AdHoc>
      <Loc>
        <PNRLocator>AAAAAA20050930</PNRLocator>
        <Terms>
          <Term key="Term1">Value1</Term>
          <Term key="Term2">Value2</Term>
        </Terms>
      </Loc>
      <Loc>
        <PNRLocator>BBBBBB20050930</PNRLocator>
        <Terms>
          <Term key="Term1">Value1</Term>
          <Term key="Term2">Value2</Term>
        </Terms>
      </Loc>
    </AdHoc>
  </REQ>
</Reply>
```

3.1.3.3.7 Example (AdHoc Confirmation) (JSON based confirmation)

Mask endpoint: **/groupagent/rest/acceptRequest**

Exmple: <http://localhost:8090/groupagent/rest/acceptRequest>

```
{
  "req": {
    "rqstID": "A756296",
    "outstationID": "homeoffic",
    "requestDate": "20180628",
    "requestTime": "1536",
    "note": [{
      "type": "RCV",
      "value": "rejuu"
    },
    {
      "type": "CFM",
      "value": "Confirmed"
    }
  ],
  "adHoc": {
    "loc": [{
      "pnrLocator": "QKRRSK/OKCASJ20170101",
      "terms": [{
        "key": "Group Shell",
        "value": "66801"
      }
    ],
    {
      "key": "Deal Date",
      "value": "20170101"
    }
  ],
    {
      "key": "Fare Basis",
      "value": "JFRG00F"
    }
  ]
}
}
```

3.1.3.3.8 Example (Series Confirmation) (XML based confirmation)

<?xml version="1.0" ?>

<Reply>

<REQ>

<RqstID>1011000530</RqstID>

<OutstationID>OUT11</OutstationID>

<RequestDate>20050930</RequestDate>

<RequestTime>1130</RequestTime>

<Note>

<Type>CTC</Type>

<Value> Boris Walden</Value>

</Note>

<Note>

<Type>RCV</Type>

<Value> Jorgen Singer </Value>

</Note>

<Note>

<Type>TXT</Type>

<Value>We appreciate your business.</Value>

</Note>

<Pattern pttnSequence="1">

```

<Loc>
  <PNRLocator>AAAAAA20050930</PNRLocator>
  <Terms>
    <Term key="Term1">Value1</Term>
    <Term key="Term2">Value2</Term>
  </Terms>
</Loc>
<Loc>
  <PNRLocator>BBBBBB20050930</PNRLocator>
  <Terms>
    <Term key="Term1">Value1</Term>
    <Term key="Term2">Value2</Term>
  </Terms>
</Loc>
</Pattern>
<Pattern pttSequence="2">
  <Loc>
    <PNRLocator>CCCCC20050930</PNRLocator>
    <Terms>
      <Term key="Term1">Value1</Term>
      <Term key="Term2">Value2</Term>
    </Terms>
  </Loc>
  <Loc>
    <PNRLocator>DDDDDD20050930</PNRLocator>
    <Terms>
      <Term key="Term1">Value1</Term>
      <Term key="Term2">Value2</Term>
    </Terms>
  </Loc>
</Pattern>
</REQ>
</Reply>

```

3.1.3.3.9 Example (Series Confirmation) (JSON based confirmation)

Mask endpoint: **/groupagent/rest/acceptRequest**

Exmple: <http://localhost:8090/groupagent/rest/acceptRequest>

```

{
  "req": {
    "rqstID": "S918",
    "outstationID": "LISTP0550",
    "requestDate": "20170724",
    "requestTime": "1149",
    "note": [{
      "Type": "CFM",
      "Value": "Confirmed"
    }],
    "pattern": [{
      "pttnSequence": "1",
      "loc": [
        {
          "pnrLocator": "YJNHBQ/RESJQL20170101",
          "dptSequence": "1",
          "bkgStatus": "HK",
          "processId": "0",
          "terms": [
            {
              "key": "Additional Conditions",
              "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
            }
          ]
        }
      ]
    }
  ]
}

```



```

        },
        {
            "key": "Baggage",
            "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
    ]
},
{
    "pnrLocator": "KORPBK/HFDGLO20170101",
    "dptSequence": "2",
    "bkgStatus": "HK",
    "processId": "0",
    "terms": [
        {
            "key": "Additional Conditions",
            "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
            "key": "Baggage",
            "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
    ]
},
{
    "pnrLocator": "FWVOTQ/TWAXGU20170101",
    "dptSequence": "3",
    "bkgStatus": "HK",
    "processId": "0",
    "terms": [
        {
            "key": "Additional Conditions",
            "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
            "key": "Baggage",
            "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
    ]
},
{
    "pnrLocator": "EELSTL/REKNLO20170101",
    "dptSequence": "4",
    "bkgStatus": "HK",
    "processId": "0",
    "terms": [
        {
            "key": "Additional Conditions",
            "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
            "key": "Baggage",
            "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
    ]
},
{
    "pnrLocator": "NSNKRE/ODGRRP20170101",
    "dptSequence": "5",
    "bkgStatus": "HK",
    "processId": "0",
    "terms": [
        {
            "key": "Additional Conditions",
            "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
            "key": "Baggage",
            "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
    ]
}
},

```

```

    {
      "pnrLocator": "MIWEZH/VZKIGU20170101",
      "dptSequence": "6",
      "bkgStatus": "HK",
      "processId": "0",
      "terms": [
        {
          "key": "Additional Conditions",
          "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
          "key": "Baggage",
          "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
      ]
    },
    {
      "pnrLocator": "UEAOPA/RXMRTTH20170101",
      "dptSequence": "7",
      "bkgStatus": "HK",
      "processId": "0",
      "terms": [
        {
          "key": "Additional Conditions",
          "value": "ATTACH SUPPORTING DOCUMENTS TO THE AUDIT COUPON"
        },
        {
          "key": "Baggage",
          "value": "APPLY NORMAL BAGGAGE ALLOWANCE"
        }
      ]
    }
  ]
}

```

3.1.3.3.10 Example (Rejection) (XML based rejection)

```

<?xml version="1.0" ?>
<Reply>
  <REQ>
    <RqstID>1011000530</RqstID>
    <OutstationID>OUT11</OutstationID>
    <RequestDate>20050930</RequestDate>
    <RequestTime>1130</RequestTime>
    <Note>
      <Type>CTC</Type>
      <Value> Boris Walden</Value>
    </Note>
    <Note>
      <Type>RCV</Type>
      <Value> Jurgen Singer </Value>
    </Note>
    <Note>
      <Type>TXT</Type>
      <Value>Not enough Quoted Fare.</Value>
    </Note>
  </REQ>
</Reply>

```

3.1.3.3.11 Example (Rejection) (JSON based rejection)

Mask endpoint: /groupagent/rest/rejectRequest

Exmple: <http://localhost:8090/groupagent/rest/rejectRequest>

```
{
  "req": {
    "rqstID": "S756371",
    "outstationID": "HOMEOFFIC",
    "requestDate": "20180711",
    "requestTime": "1444",
    "note": [
      {
        "type": "RJT",
        "value": "rejected with some reason"
      }
    ]
  }
}
```

Web Service Interface communication

3.1.4 General Information

Please refer to the PROS web service process specification document for the detail information. G6 expects only one web service provider for this communication.

3.1.5 CCITIN

Overview

The Itinerary Selection interface is one of the interfaces between the PROS Group 6 System and the Reservation System. For each group request which is loaded to the PROS Group 6 System, an itinerary selection request is sent to RES to retrieve all possible flight combinations to accommodate the requested directions. So this interface would require a request message/element and a reply message/element.

The size of the request file is usually below 1 kb and response file size is around 1 to 2 kb per flight option. (Each option constitutes the details for 1 flight for 1 itinerary direction).

The response time for the most complicated requests is expected to be approximately 30-35 seconds.

Message/Signature

- public String getCcitinOption(String Request) –Request Message

3.1.5.1 Itinerary Selection Request

3.1.5.1.1 Description

In order to start the evaluation process, the Group System would need to know the flight itineraries that are available in the RES system that match the Group Request. This message will contain the itinerary request information.

Below is the link to the initial XML Schema draft for Request message element and a brief description of the data fields.

3.1.5.1.2 Data Fields

DataSet: Request (version="X.X" airlineVendorID="ZZ") X.X is the current SID version.
ZZ is the home base carrier code.

RecordSet: Direction

Data Field	Format	Re q'd	Refere ntial	Validity	PK	Example	Description / Note
Id	NUM 02	Y				1	Reference Number for the direction of travel i.e. 1, 2, 3 etc
Origin	CITY	Y				JFK	Directional origin
destination	CITY	Y				LHR	Directional destination
returnOption	NUM 01	Y				0	0 = Include all flights that fit within the date and time range (Default) 1 = Include preferred flight in all cases, even if it is not in the date and time range, if given. 2 = Return just the preferred flight, if given.
cityPOS	CITY	N					PNR Base used. Don't pass this field if there is no value.
countryPOS	CHAR 05	N				DE	Country POS. If not provided, it will be determined using City POS.
direction_informative	CHAR 03	N		yes/no		yes	Use yes/no for this field. Marks if direction is informative.
origin_informative	CHAR 03	N		yes/no		yes	If the origin is a feeder flight city set this to "yes".
destination_informative	CHAR 03	N		yes/no		yes	If the destination is a feeder flight city set this to "yes".
via	CITY	N				LAX	Optional city to fly through
compartment	CHAR 02	N				Y	Compartment code
OALonly	CHAR 03	N		yes/no		no	If only OAL is allowed, set to "yes"
directFlightsOnly	CHAR 03	N		yes/no		no	If the direction should be direct, set to "yes"
allowOAL	CHAR 03	N		yes/no		yes	If the direction can include OAL, then set to "yes".
pnrLocator	LOCATOR	N					PNR Base used. Don't pass this field if there is no value.
requestId	CHAR 10	N				A12345	Unique Reference Number used for identifying a Group Request application. This valuable information can be used for debugging purposes by CCITIN interface developer. Don't pass this field if there is no value.
<DepartureDate>		Y					Departure Date information
<Flight>		N					Flight information. Don't pass this field if there is no value.

3.1.5.1.2.1 Departure Date Data Fields

RecordSet: Departure

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
startDate	DATE	Y			Y	20020924	Start Date
endDate	DATE	Y			N	20021024	End Date
frequency	FLAG 07	Y			N	000100	The 7 digits are treated as a flag indicator for the day of the week. The first digit represents Monday, and the seventh digit represents Sunday. 1011001 = Mon, Wed, Thu, Sun 0100110 = Tue, Fri, Sat
startTime	TIME 04	Y			N	0000	0000 – 2359
endTime	TIME 04	Y			N	2359	0000 – 2359
orientation	CHAR 02	Y			N	A	A = arrival D = departure (Default)

3.1.5.1.2.2 Flight Data Fields

RecordSet: Flight

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
carrier	CARRIER	Y			Y	ZZ	Carrier Code
flightNumber	FLIGHT 05	Y			N	00100	Flight Number
sequenceNumber	NUM 02	Y			N	1	Flight Sequence Number
setNumber	NUM 02	N				1	Flight Set Number
origin	CITY	N			N	HOU	Preferred flight origin. Don't pass this field if there is no value.
Destination	CITY	N			N	LAX	Preferred flight destination. Don't pass this field if there is no value.
Date	DATE	N			N	20051024	If no departure date is specified, field must be blank. Don't pass this field if there is no value.

3.1.5.1.3 Processing Rules

3.1.5.1.4 Loader Behavior

3.1.5.1.5 Schema

The content of schema can be found at /config/interface/xsd/ccitinreq.xsd file.

3.1.5.1.6 Example

```
<?xml version="1.0"?>
<Request version="1.4" airlineVendorID="ZZ">
  <Direction id="1"
    origin="HOU"
    destination="LAX"
    returnOption="0"
```

```

cityPOS="HOU"
pnrLocator="B32DT20050812"
requestId="A12345">
<DepartureDate startDate="20020924"
endDate="20021024"
frequency="0001000"
startTime="0000"
endTime="2359"
orientation="A"/>
<Flight carrier="ZZ"
flightNumber="00100"
sequenceNumber="1"
setNumber="1"
origin="HOU"
destination="LAX"
date="20021024"/>
</Direction>
</Request>

```

3.1.5.2 Itinerary Selection Response

3.1.5.2.1 Description

This will contain the response from the RES system with the set of possible Itineraries that would match the request. The information that must be passed to the Group System is for the Traveled Legs and for ALL Segments of the applicable flights.

3.1.5.2.2 Data Fields

DataSet: Response

RecordSet: Direction

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
id	NUM 02	Y				1	The direction starts from 1. It must match the request directional information.
errMsg	CHAR 50	N				"No option available"	If there is any error, provide the error message.
<Option>		N					Option information

3.1.5.2.2.1 Option Data Fields

RecordSet: Option

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
id	NUM 02	Y				1	The option number must start from 1 within each direction.
EFT	TIME 04	N				0130	The elapsed flying time of the option.
<Flight>							Flight information

3.1.5.2.2.2 Flight Data Fields

RecordSet: Flight

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
carrier	CARRIER	Y				ZZ	The option number must start from 1 within each direction.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
flightNumber	FLIGHT 05	Y				00001	Flight Number
marketingCarrier	CARRIER	N				ZZ	Marketing Carrier Code
marketingFlightNumber	FLIGHT 05	N				00001	Marketing Flight Number
sequenceNumber	NUM 02	Y				1	Flight Sequence Number. This number starts from 1.
departureDate	DATE	Y				20031005	This Departure Date must correspond with the one of the first leg of the flight (Flight Departure Date), regardless of the actual departure date of the leg/segment traveled by the group.
Origin	CITY	Y				HOU	Group boarding point.
Destination	CITY	Y				LAX	Group off-boarding point.
departureTime	TIME 04	Y				0000	Departure Time
arrivalTime	TIME 04	Y				0000	Arrival Time
noneControlFlag	FLAG 01	N				1	This flag indicates the flight does not exist in the OD/P. By default, do not send this flight if the flight is available in OD/P.
arrivalDate	Date	N				20110101	Group off-boarding arrival date.
aircraftType	CHAR 04	N				321	Aircraft type code
EFT	TIME 04	N				0130	Elapsed flying time of the flight.
<Leg>		Y					Leg information
<Segment>		Y					Segment information

3.1.5.2.2.3 Leg Data Fields

This record must contain information **only** for traveled legs.

RecordSet: Leg

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
dateOffset	NUM 02	Y				0	The date offset value must be the difference between the group travel date and the flight departure date for this leg. For example we have a flight with two legs. First leg of flight travels on Jan 25, and second leg travels on Jan 26. If the travel O&D is on the second leg of this flight, the date offset is 1 for this leg.
destination	CITY	Y				LAX	Leg Destination
sequenceNumber	NUM 02	Y				1	Leg Sequence Number. Segment must start with 1
aircraftConfig	CHAR 06	N					Aircraft Configuration Key To be use for Convertible Seat logic only . Don't pass this field if there is no value.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
allowBooking	FLAG 01	Y				1	1 = Booking allowed (Default) 0 = No Booking Allowed
allowSale	FLAG 01	Y				1	1= Sale allowed (Default) 0 = No sale allowed
allowGroup	FLAG 01	Y				1	1= Group Allowed (Default) 0 = No Group Allowed
allowWaitList	FLAG 01	Y				1	1 = Waitlist allowed (Default) 0 = No waitlist allowed
<Compartment>		Y					Leg compartment
<Arcf>		N					Aircraft Configuration List This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system. If this field is used, the Aircraft Configuration Key should not be provided on the Leg level. Instead, it should be provided with the Aircraft Configuration List.
<InvMap>		N					Inventory Map This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.

3.1.5.2.2.4 Aircraft Configuration List

RecordSet: Arcf

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
key	ASCII	Y				CL6	Aircraft Configuration key
<Configuration>		Y					

3.1.5.2.2.4.1 Aircraft Configuration Data Fields

RecordSet: Configuration

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
id	ASCII	Y				003	Configuration ID
<Cmp>		Y					

3.1.5.2.2.4.1.1 Aircraft Configuration Compartment Data Fields

RecordSet: Cmp

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				C	Compartment code

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
phyCap	NUMBER 03	Y				120	Physical Capacity

3.1.5.2.2.5 Inventory Map

RecordSet: InvMap

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
key	ASCII	Y				902	Inventory Map key
<Compartment>		Y					

3.1.5.2.2.5.1 Inventory Map Compartment Data Fields

RecordSet: Compartment

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				C	Compartment code
<Class>		Y					

3.1.5.2.2.5.1.1 Inventory Map Class Data Fields

RecordSet: Class

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				M	Class code
parentClass	SYMBOL 02	Y				B	Parent Class

3.1.5.2.2.6 Leg Compartment Data Fields

RecordSet: Compartment

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				F	Compartment Code.
capacity	NUM 03	Y				123	Physical Capacity
adjustedCapacity	NUM 03	N				123	Adjusted Capacity This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.
totalBooked	NUM 03	Y				100	Total Compartment Booked
odFactor	NUM 03	Y				100	This is the factor used to sum the marginal fares to form a directional marginal fare in the case of multiple legs that form a direction. This is used if the OD is selected as the OD factor. Default: 100.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
oalAvailability	NUM 03	N				100	OAL availability passing from the Reservation system.
groupBooked	NUM 03	N				20	Compartment Group Bookings. If this field is provided, then the aggregation of the Class level groupBooked will be ignored. Most Segment-control carriers do not have the Leg Class information. Thus, this field can provide the missing information to help on the AP rule setting.
groupCapacityPercent	NUM 02	N				50	Percentage of capacity that groups may use
totalAU	NUM 03	N				22	Total AU This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.
fcstOut	NUM 03	N				5	Forecasted Out This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.
fcstDmdLF	FLT 11.5	N				89.6	Forecasted Demand Load Factor This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.
<Bid Price>		N					Bid Price vector This field should only be provided when GRMS is used without a connection to ODWI and obtains revenue management data from the reservation system.
<Class>							Leg Class. It is required for the Leg control carriers

3.1.5.2.2.7 Leg Bid Price Data Fields

RecordSet: Bid Price

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
vector	ASCII	Y				"100,95,80,50,25,1,0"	Bid Price Vector – List of bid prices, comma separated, ordered from 0 seats remaining to X seats remaining
index	NUM 03	N				17	Index of current seat in the bid price vector. If index is not provided, it is calculated as Leg Compartment AU – Leg Compartment Booked.

3.1.5.2.2.8 Leg Class Data Fields

RecordSet: Class

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				C	Class Code
parentCode	SYMBOL 02	Y				C	Parent Class code
nestedAU	NUM 03	Y				100	Class Nested AU
totalBooked	NUM 03	Y				100	Class Total Bookings
groupBooked	NUM 03	Y				20	Class Group Bookings
allowBooking	FLAG 01	Y				1	1 = Booking allowed (Default) 0 = No Booking Allowed
allowSale	FLAG 01	Y				1	1= Sale allowed (Default) 0 = No sale allowed
allowGroup	FLAG 01	Y				1	1= Group Allowed (Default) 0 = No Group Allowed
allowWaitList	FLAG 01	Y				1	1 = Waitlist allowed (Default) 0 = No waitlist allowed
seatsBlocked	NUM 03	Y				100	Seats Block (Convertible seat only) This field can be used to set a minimum number of seats in a certain class that cannot be converted. Default to 0

3.1.5.2.2.9 Segment Data Fields

This record contains information for **all** segments of this flight. It may contain the segment not satisfy the directional O&D.

RecordSet: Segment

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
origin	CITY	Y				HOU	Segment origin
destination	CITY	Y				LAX	Segment destination
sequenceNumber	NUM 02	Y				1	Segment Sequence Number. Segment must start with 1
allowBooking	FLAG 01	Y				1	1 = Booking allowed (Default) 0 = No Booking Allowed
allowSale	FLAG 01	Y				1	1= Sale allowed (Default) 0 = No sale allowed
allowGroup	FLAG 01	Y				1	1= Group Allowed (Default) 0 = No Group Allowed
allowWaitList	FLAG 01	Y				1	1 = Waitlist allowed (Default) 0 = No waitlist allowed
<Compartment>		Y					Segment compartment

3.1.5.2.2.10 Segment Compartment Data Fields

RecordSet: Compartment

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
------------	--------	-------	-------------	----------	----	---------	--------------------

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				F	Compartment Code.
groupBooked	NUM 03	Y				123	Compartment Group Bookings
allowAvailability	FLAG 01	N*				1	This is an optional field. This field can be ignored by customers who provide NestedAU in the segment class level. The purpose of the field is to support segment based customers who can only provide nestedAvailability instead of nestedAU. If this field is set to 1, it will tell the system (G) to use the nestedAvailability field (instead of nestedAU) for all the availability calculations. Note: If the flag is set to 1, and nestedAvailability field is not populated, G6 will treat the nestedAvailability value as 0.
<Class>		Y					Compartment Class

3.1.5.2.2.11 Segment Class Data Fields

RecordSet: Class

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
code	SYMBOL 02	Y				C	Class Code
parentCode	SYMBOL 02	N				C	Parent Class code. It is required for the segment control carriers. Don't pass this field if there is no value.
nestedAU	NUM 03	N*				100	Segment Control Carriers: Class segment Nested AU. This field is required. Leg Control Carriers: This field is optional for leg control carriers. Don't pass this value if there is no value.
limit	NUM 03	N*				100	Segment Control Carriers: This field is optional for the Segment control carriers. Leg Control Carriers: Class segment limit. This field is required. If not known, pass 999.
totalBooked	NUM 03	Y				100	Class Total Bookings
groupBooked	NUM 03	Y				20	Class Group Bookings
classPos	CHAR 10	N				All	Class point of sales. It is required for the segment control carriers. Don't pass this field if there is no value.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
allowBooking	FLAG 01	Y				1	1 = Booking allowed (Default) 0 = No Booking Allowed
allowSale	FLAG 01	Y				1	1= Sale allowed (Default) 0 = No sale allowed
allowGroup	FLAG 01	Y				1	1= Group Allowed (Default) 0 = No Group Allowed
allowWaitList	FLAG 01	Y				1	1 = Waitlist allowed (Default) 0 = No waitlist allowed
nestedAvailability	NUM 03	N*				999	This field is recommended to be used only when nestedAU is not available from RES. Segment Control Carriers: Class segment Nested availability. This field is optional. . It is designed for any segment carrier that is not able to provide NestedAU value. Don't pass this value if there is no value. Leg Control Carriers: This field is optional for leg control carriers. Don't pass this value if there is no value.
odAvailability	NUM 03	N				9	This field is optional. It should only be sent if you intend to use class availability during evaluation.

3.1.5.2.3 Processing Rules

None

3.1.5.2.4 Loader Behavior

Insert/Update

3.1.5.2.5 Schema

The content of schema can be found at /config/interface/xsd/ccitinrep.xsd file.

3.1.5.2.6 Example

```
<?xml version="1.0"?>
<Response>
  <Direction id="1">
    <Option id="1">
      <Flight carrier="ZZ"
        flightNumber="00001"
        sequenceNumber="1"
        departureDate="20031005"
        origin="HOU"
        destination="LAX"
        departureTime="0000"
        arrivalTime="0000">
      <Leg dateOffset="0"
        destination="LAX"
        sequenceNumber="1"
        aircraftConfig="ZZ0001"
        allowBooking="1"
```

```

allowSale="1"
allowGroup="1"
allowWaitList="1">
  <Compartment code="Y"
    capacity="123"
    totalBooked="100"
    odFactor="100">
    <Class code="Y" // required for the leg control carriers
      parentCode="Y"
      nestedAU="100"
      totalBooked="100"
      groupBooked="20"
      allowBooking="1"
      allowSale="1"
      allowGroup="1"
      allowWaitList="1"
      seatsBlocked="100"/>
    </Compartment>
  </Leg>
<Segment origin="HOU"
  destination="LAX"
  sequenceNumber="1"
  allowBooking="1"
  allowSale="1"
  allowGroup="1"
  allowWaitList="1">
  <Compartment code="Y"
    groupBooked="100">
    <Class code="Y"
      parentCode="Y" // required for the segment control carriers
      nestedAU="100" // required for the CITP additional field
      limit="100"
      totalBooked="100"
      groupBooked="20"
      classPos="ALL" // required for the segment control carriers
      allowBooking="1"
      allowSale="1"
      allowGroup="1"
      allowWaitList="1"/>
    </Compartment>
  </Segment>
</Flight>
</Option>
</Direction>
</Response>

```

text error messages must be provided only when errors occur.

```

<?xml version="1.0"?>
<Response>
  <Direction id="1" errMsg="Communication Failed">
  </Direction>
</Response>

```

Note: Group expects the classes to be passed in the descending nested order. Parent classes appear before the child classes.

For example,

```

<Compartment code = "Y"
  <Class code="Y"
    parentCode="Y"
    ....>
    <Class code="H"
      parentCode="Y"
      ....>
      <Class code="K"
        parentCode="H"
        ....>
        <Class code="B"
          parentCode="K"
          ....>
          <Class code="X" // second cluster if any
            parentCode="Y"
            ....>
            <Class code="T"
              parentCode="X"
              .....>
              .....
</Compartment>

```

The nested classes must be clustered together in the descending order (parent class display first). In a hybrid nesting case, a second cluster group must follow the first cluster group.

3.1.6 PNRGen

Overview

After the Group Request is evaluated from within the Group System and the appropriate itineraries selected for the Group, the information is then communicated to the RES system. The RES system would reply back with a confirmation that the PNR data in RES has been updated.

Message/Signature

- public String getPNRResult (String Request) –Request Message

3.1.6.1 PNRGen Request

3.1.6.1.1 Description

This message will contain the PnrGen Request information that will be passed from the Group System to the RES.

3.1.6.1.2 Data Fields

DataSet: Request (version="X.X" airlineVendorID="ZZ") X.X is the current SID version. ZZ is the home base carrier code.

This group record contains general Group information. There can only be one Group record for every group shell to be created/updated.

RecordSet: Group

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
------------	--------	-------	-------------	----------	----	---------	--------------------

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
id	NUM 10	Y				123	Unique identifier in the G6 system assigned to each request. For the PNR-based system, the id will be 0 when performing a request rejection.
seriesId	NUM 10	N				100	Ad hoc requests will have no value. Don't pass this field if there is no value.
userId	CHAR 128	Y				JOHN	User ID
outstation	CHAR 09	Y				HOU	Outstation ID
groupName	CHAR 50	Y				Leisure	Group Name
customerType	NUM 10	Y				123	Customer Type
groupType	CHAR 02	Y				A	A = ad hoc (Default) S = series
mktOrigin	CITY	N				HOU	Default to first direction of origin. Don't pass this field if there is no value.
mktDestination	CITY	N				LAX	Default to first direction of destination. Don't pass this field if there is no value.
cityPos	CITY	N				HOU	City POS
districtPos	CITY	N				US	District POS
iata	CHAR 10	N				12345	Agency IATA. Don't pass this field if there is no value.
officeCode	CHAR 10	N				12345	Office Code. Don't pass this field if there is no value.
agencyName	CHAR 50	N				World Travel	Agency Name. Don't pass this field if there is no value.
realFare	NUM 10	N				300	Real Fare for the group shell. Weighted average value for this group shell. This field is for the referenc only. The actual fare information must be the real fare under PNR level. Please check 3.5.3.1.2.1
commPercent	NUM 02	N				5	Commission Percentage
passes	NUM 03	N				1	Passes. Don't pass this field if there is no value.
requestId	CHAR 10	N				R12345	Request ID. Don't pass this field if there is no value.
totalTripFare	NUM 10	N				400	Don't pass this field if there is no value.
keyAccount	CHAR 06	N				IAH	keyAccount field associated with the iata. This field is retrieved from Agency table using the iata as a reference value. This field will only be populated if the KeyAccount value is populated in the Agency table.

Elements

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
<PNR>		Y					PNR information
<PRO>		N					Text information. Don't pass this field if there is no value.
<PRM>		N					Miscellaneous Information. Don't pass this field if there is no value.

3.1.6.1.2.1 PNR Data Fields

This PNR record contains PNR header information.

RecordSet:PNR

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
index	NUM 03	Y				1	Unique identifier in the G6 system assigned to each request
locator	LOCATOR	N					Includes Creation Date This field will only be filled out in case of re-evaluation and PNR request. Don't pass this field if there is no value.
primIndicator	FLAG 01	Y				1	0 = PNR child 1 = PNR parent (Default)
utilRate	NUM 03	N					GHI feature. Materialization rate assigned to the PNR by the Materialization process in G6.
numberInParty	NUM 03	N					GHI feature. Original seats requests by the group.
realFare	NUM 10	N				300	Real Fare for the PNR.
localFare	NUM 10	N				300	Local Fare for the PNR.
ancillaryRevenue	NUM 10	N				150	This is the sum of all ancillary revenue for the selected options.
adjustedRealFare	NUM 10	N				300	Adjusted Net Real Fare for the PNR. It does not contain the Ancillary Revenue.

Elements

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
<Itinerary>		Y				HOU	Itinerary information
<Deals>		N					Deal message

3.1.6.1.2.2 Text Data Fields

This PRO record contains remarks that will be included in the PNR upon generation. There can be multiple PRO records per PNR block. In general, the value is the text message for

the PRO. A special type of reminder is available for the feature of name firming. The name firming format will look like the following.

```
<PRO noteType="NFM"
      value="1 90 20070101
            2 60 20070201
            3 30 20070301
            4 0 20070401
            5 0 20070401"/>
```

RecordSet: PRO

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
noteType	CHAR 04	Y				PRC	Predefined four letter identifier (i.e. SSR, PRC,... etc)
value	CHAR 255	Y				CONTACT INFORMATI ON	Includes Creation Date This field will only be filled out in case of re-evaluation and PNR request.

3.1.6.1.2.3 Miscellaneous Data Fields

This PRM record is a PNR miscellaneous record. It contains one PRM record per Group.

RecordSet: PRM

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
programName	CHAR 50	N				program	Program Name. Don't pass this field if there is no value.
tourName	CHAR 50	N				tourName	Tour Name. Don't pass this field if there is no value.
currencyCode	CHAR 03	N				currencyC ode	Local Currency Code. Don't pass this field if there is no value.
localFare	NUM 10	N				localFare	Local Fare. Don't pass this field if there is no value.
refPnrLocator	LOCATOR	N				refPnrLoc ator	Reference PNR Locator. Don't pass this field if there is no value.
exchangeRate	FLT 11.5	N				1.5	Rate-of-Exchange. Don't pass this field if there is no value.
SourceCRS	CHAR 05	N				AM	Central Reservation System. This field will not be passed if there is no value.

3.1.6.1.2.4 Itinerary Data Fields

This Itinerary record contains PNR/Segment level information. There can be multiple Itinerary records for each PNR record.

RecordSet: Itinerary

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
lineNum	NUM 03	Y				1	Itinerary Line Number
carrier	CARRIER	Y				ZZ	Includes Creation Date This field will only be filled out in case of re-evaluation and PNR request.
flightNumber	FLIGHT 05	Y				00001	Flight Number
departureDate	DATE	Y				20031005	Format: YYYYMMDD
origin	CITY	Y				HOU	Segment Origin
destination	CITY	Y				LAX	Segment Destination
classCode	SYMBOL 02	Y				C	Class Code
paxNumber	NUM 03	Y				20	Number Passenger Booked
actionCode	SYMBOL 02	N				KK	Action requires status code
classPos	CHAR 10	N					Class POS

3.1.6.1.2.5 Deal Data Fields

3.1.6.1.2.6

The data fields contain necessary information to support the Deal Code feature.

RecordSet: Deals

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
Deal	CHAR 1024	Y				Some Value	Each Deal Element will have one of these entries.

Deal Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
key	CHAR 32	Y				Some Key	Key for a Deal

3.1.6.1.3 Processing Rules

None

3.1.6.1.4 Loader Behavior

Insert/Update

3.1.6.1.5 Schema

The content of schema can be found at /config/interface/xsd/pnrgenreq.xsd file.

3.1.6.1.6 Example

```
<?xml version="1.0"?>
<Request version="1.4" airlineVendorID="ZZ">
  <Group id="1"
```

```

seriesId="1"
userId="LEE"
outstation="HOU"
groupName="Leisure"
customerType="123"
groupType="A"
mktOrigin="HOU"
mktDestination="LAX"
cityPos="HOU"
districtPos="US"
iata="12345"
officeCode="officeCode"
agencyName="World Travel"
realFare="100"
commPercent="5"
passes="12"
requestId="R12345"
totalTripFare="100">
<PNR index="1"
    locator="Locator"
    primIndicator="1"
    realFare="100"
    localFare="100"
    >
    <Itinerary lineNum="1"
        carrier="ZZ"
        flightNumber="00001"
        departureDate="20031005"
        origin="HOU"
        destination="LAX"
        classCode="C"
        paxNumber="20"
        actionCode="KK"
        classPos="all"/>
    <Deals>
        <Deal key="Key1">Value1</Deal>
        <Deal key="Key2">Value2</Deal>
    </Deals>
</PNR>
<PRO noteType="SSR"
    value="SSR value"/>
<PRO noteType="OSI"
    value="OSI value"/>
<PRO noteType="IMP"
    value="IMP value"/>
<PRO noteType="HLD"
    value="HLD value"/>
<PRO noteType="PRC"
    value="Contact Info"/>
<PRM programName="program"
    tourName="tourName"
    currencyCode="USD"
    localFare="100"
    refPnrLocator="A12345"
    exchangeRate="1.0"/>
</Group>
</Request>

```

3.1.6.2 PNRGen Response

3.1.6.2.1 Description

This message will be the reply from the RES in response to the PnrGen request. The reply will contain the Pnr Locator or Pnr Reference Number.

3.1.6.2.2 Data Fields

It contains general Group/PNR information. There must be only one Group record for each Group Shell.

DataSet: Response

RecordSet: Group

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
id	NUM 10	Y				C	Unique identifier in the G6 system assigned to each request
errMsg	CHAR50	N				"Communication error"	If there is any error, provide the error message.
<PNR>		N					PNR information

3.1.6.2.2.1 PNR data fields

It contains PNR header information. There can be multiple PRR records;

RecordSet: PNR

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
index	NUM 03	Y				1	Unique identifier in the G6 system assigned to each request
locator	LOCATOR	Y					PNRLOCATOR value return from the reservation system.
errMsg	CHAR 50	N					If there is any error, provide the error message.
rejectFlag	NUM 01	N				0	If GRMS has to automatically reject the request after this attempted PNRGEN then set this flag to 1 and set the errMsg to why GRMS needs to reject.
<Itinerary>		N					Itinerary information.

3.1.6.2.2.2 Itinerary data fields

It contains PNR/Segment information. There can be multiple Itinerary records for each PNR record.

RecordSet: Itinerary

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
lineNum	NUM 03	Y				1	Itinerary Line Number
status	CHAR 02	Y				HK	Booking status

3.1.6.2.3 Processing Rules

3.1.6.2.4 Loader Behavior

3.1.6.2.5 Schema

The content of schema can be found at /config/interface/xsd/pnrngenrep.xsd file.

3.1.6.2.6 Example

```
<?xml version="1.0"?>
<Response>
  <Group id="1">
    <PNR index="1" locator="AAAAA20051010">
      <Itinerary lineNum="1" status="HK"/>
    </PNR>
  </Group>
</Response>
```

3.1.7 PNR Refresh

Overview

After the Group Request is loaded from within the Group System, the same PNR information in RES system may be updated. This PNR Refresh interface will retrieve the latest PNR information from RES system and load the latest PNR information to the G6.

Message/Signature

- public String getPNRImage(String Request) –Request Message

3.1.7.1 PNR Refresh Request

3.1.7.1.1 Description

This message will contain the Pnr Request information that will be passed from the Group System to the RES.

3.1.7.1.2 Data Fields

DataSet: Request (version="X.X" airlineVendorID="ZZ") X.X is the current SID version. ZZ is the home base carrier code.

This PNR record contains general PNR information. There must be one PNR record for every PNR request to be updated.

RecordSet: PNR

Attributes

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
pnrLocator	LOCATOR	Y				B32DT2005 0812	Unique Identifier for current and historical PNRs in the G6 system. In case of add-on group requests, the PNR Locator is empty for the mask input.

Data Field	Format	Req'd	Referential	Validity	PK	Example	Description / Note
primPnrLocator	LOCATOR	N				B32DT2005 0812	Unique Identifier for current and historical PNRs in the G6 system. In case of split PNRs, the locator of the Parent (or Master) PNR must go into this field. This field will decide what primary PNR indicator to use during the PNRGen operation. In case of add-on group requests the Primary PNR Locator is empty.
refPnrLocator	LOCATOR	N				B32DT2005 0812	In case of add-on group requests the Reference PNR is the PNR that is being added to. In the case of a request originated from a GDS PNR, the Reference PNR will be the GDS PNR. Don't pass this field if there is no value.
requestId	CHAR 10	Y				Group433	Unique Reference Number used for identifying a Group Request application.
outstation	CHAR 09	Y				OUT11	Airlines Outstation/Sales office where request originates from.
requestDate	DATE	Y				20050930	Date group booking request submitted to G6. Format: YYYYMMDD
requestTime	TIME 04	Y				1130	Time group booking request submitted to G6. Format: 0000 – 2359
requestTypeFlag	FLAG	Y				0	Flag to identify different "types" of requests: 0 = "Regular" request 1 = Add-on request – to increase the number of seats originally requested 2 = Re-evaluation request – to modify and already booked group.

3.1.7.1.3 Processing Rules

None

3.1.7.1.4 Loader Behavior

Insert/Update

3.1.7.1.5 Schema

The content of schema can be found at /config/interface/xsd/refreshreq.xsd file.

3.1.7.1.6 Example

```
<?xml version="1.0"?>
<Request version="1.4" airlineVendorID="ZZ">
  <PNR pnrLocator="AAAAAA20121231"
    requestId ="AAAAAA2012"
    outstation="HOU"
```

```

requestDate="20120101"
requestTime ="1130"
requestTypeFlag ="0"/>
</Request>

```

3.1.7.2 PNR Refresh Response

3.1.7.2.1 Description

This message will be the reply from the RES in response to the PNR Refresh request. The reply will contain the Ah Hoc request file format.

3.1.7.2.2 Data Fields

The PNR Refresh data format must be identical to the one in the 3.3.2.1 Ad Hoc Request.

Reservation migration

3.1.8 General Information

When a GRMS customer changes RES Systems, it is necessary to make some changes in the GRMS data. Specifically, changes related to active PNRs record locators as these will certainly change with the new RES.

The purpose of this document is to define the format required to migrate the active record locators in GRMS (related to the old RES system) to the new locators of the new RES.

3.1.9 Input Format

In order to execute this conversion, the new RES vendor needs to provide the "Migration PNR Reference file". This is a text file that will list in each row the new PNRs locator and its creation date, along with the old PNR locator and its creation date. These 4 elements need to be comma separated. With this, the format will be as follows:

Element Position	Element Name	MAX Width	Mandatory	Comment
1	New PNR Locator	6	yes	Record locator of the PNR from the <i>new</i> RES system
2	comma	1	yes	Separator. Set to ","
3	New PNR Creation Date	8	yes	Creation date of the PNR in the <i>new</i> RES system. Must be in YYYYDDMM format
4	comma	1	yes	Separator. Set to ","
5	Old PNR Locator	6	yes	Record locator of the PNR from the <i>old</i> RES system. This is in fact the locator that must exist in GRMS before the conversion.
6	comma	1	yes	Separator. Set to ","
7	Old PNR Creation Date	8	no	Creation date of the PNR in the <i>old</i> RES system. Must be in YYYYDDMM format. Note: This field can be left empty if the old PNR locator's creation date cannot be provided. If this field is left empty the script will use the newest creation date of the matching PNR locator that exists in GRMS DB. If more than one PNR locator with the same locator string then only the newest one will be converted.

Note: There shall be 1 line per PNR locator, no blank elements, and no empty lines.

3.1.10 Example

```
QZ45IR, 20081231, 2NR9V, 20080617
QZ45IW, 20081231, R1F8C,
QZ45IX, 20081231, R4FSD,
QZ45IY, 20081231, KM7N1,
QZ45IZ, 20081231, S45RW, 20080228
...
```

Note: Old PNR Creation date of the 3 middle lines (locators **QZ45IW**, **QZ45IX** and **QZ45IY**) is intentionally left out to show the optional nature of this field.

3.1.11 File

Load Order	Data	Pattern	Task Name
1	Reservation Migration	PNR_LOC_INPUT.txt	NA

4. Interface Communication Protocol

Overview

This section will serve as the requirements for the file transfer protocol. The protocol will be used to load files into the Group System. The interface is based on a polling mechanism. To accomplish this, the system observes a specified directory, looking for files that match certain patterns (called "*file patterns*"). The system determines which file pattern to use based on a task and possibly a task order. Once it finds the file matching the appropriate file pattern, it loads the file immediately. This process is described in more detail, below. Other files, not included in the ordered task, can be loaded at any time other than the time the ordered task is running.

File Loading Tasks

4.1.1 Loading Files

Each file type has a specific task that looks for a particular file pattern. When a new file has been copied to the proper location and is ready to be loaded, the task is started manually using a "runTask" script. Listed below are files considered to be "On-Demand" or Optional, along with the relevant task name and file patterns required to load the file. Keep in mind the proper load order for these files when setting up a new system. For more information, see I&M Guide.

Load Order	Data	Pattern	Task Name
1	Travel Agency	.AGENCY.	pLoadAgency
2	City Point of Sale	.CITYPOS.	pLoadCity
3	District Point of Sale	.DISTPOS.	pLoadDist
4	Market O&D	.MKTOD.	pLoadMktOD
5	Market Origin	.MKORG.	pLoadMarketOrigin
6	Market Fare	.MKFARE.	pLoadMarketFare
7	Market Special fare	.MKSPFARE.	pLoadMarketSpecialFare
8	Market Matrix	.MKTMATRIX.	pLoadMarketMatrix
9	Market Matrix Date Range	.MKTMATRIXDATERANGE.	pLoadMarketmatrixDateRange
10	Fare Matrix	.MKTFAREADJUSTMENT.	pLoadMarketFareAdjustment
11	Customer Type	.CUSTTYPE.	pLoadCustomerType
12	Exchange Rate	.EXCHANGE.	pLoadExchangeRate
13	Peak/Off-peak Period	.POP.	pLoadPOP
14	Traffic Area	.TRAFFIC.	pLoadTraffic
15	Region	.REGION.	pLoadRegion
16	Country	.COUNTRY.	pLoadCountry
17	OAL Fare	.OALFARE.	pLoadOALFare
18	Marketing Flight	.MKTFLTFARE.	pLoadMarketingFlightFare

Load Order	Data	Pattern	Task Name
19	Deposit Deadline	.DEPOSITDEADLINE.	pLoadDepositDeadline
20	Name Firming Deadline	.NAMEFIRMINGDEADLINE.	pLoadNameFirmingDeadline
21	Flight Group Capacity Control	.FLIGHTGROUPCAPACITY.	pLoadFlightGroupCapacity

Once the task is triggered, a single file matching the file pattern will be loaded from a specified directory. Once the file is loaded, it will be renamed to indicate the load is complete. If multiple files are required, then the task will have to be triggered once for each file.

4.1.2 Transactional Files

For the "Transactional" files, a single task will be configured with a specified number of each file and a file order. The following represents the Transactional files, file order, file patterns, and number of each file:

Load Order	Data	Pattern	Individual Load Task
1	Request Load	.REQUEST.	pLoadRequest
2	PNRload	.PNR.	pLoadPnr
3	AcceptLoad	.ACCP.T.	pLoadAcceptance
4	SeriesLoad	.SERIES.	pLoadSeries
5	RejectLoad	.REJECT.	pLoadReject

All files of a specified type will be loaded prior to the next file type starting to load.

Once a file is loaded, it will be renamed to indicate the load is complete.

4.1.3 File Rename

As mentioned, once any file is loaded, it will be renamed to indicate the load is complete. The renamed files will start with an underscore ("_") and a timestamp suffix will be appended to indicate they have been loaded. No file without an XML suffix will be loaded again.

4.1.4 Repetitious Loads

Administrators can govern the number of repetitions for each data file load task by specifying the number of repeats for each loader. This can be accomplished using the *Task Manager Control File*, to be described in the *System Administrator's Guide*.

4.1.5 Load Order Dependencies

For data with referential integrity, an order of file loading is required. Referential integrity of data files is defined in the above sections for each data file. For instance, to load the terminal data, the city data is required. If the data is not loaded in the proper order, then records will be rejected.

4.1.6 Load Statistics

Load statistics will be provided in the task manager log file. Statistics for both parent and child records are shown. The following statistics will be provided for each file loaded:

- Total records processed
- Total records inserted
- Total records ignored/duplicates
- Total records with errors
- Start time
- End time

4.1.7 Logging

One log file will be produced for data loading that will contain error messages (ERROR), warning messages (WARN), and informational messages (INFO). The system can be configured to log only certain types of messages by using the LOG_MIN_LEVEL parameter for the data services.

The parameter settings and resulting log message filtering are described below:

LOG MIN LEVEL PARAMETER	Messages Logged
ERROR	ERROR
WARN	ERROR, WARN
INFO	ERROR, WARN, INFO

File Output Tasks

PROS Group System will generate a confirmation/rejection remark file for each group request named "RequestID_Outstation_RequestDate".REP. This file will act as a communication media between the group user and the original requester. However, Airlines is required to provide a facility to handle the connection process.

4.1.8 Output Files

Data	Pattern	Task Name
Request Confirmation	RequestID_Outstation_RequestDate. REP	
Request Rejection	RequestID_Outstation_RequestDate. REP	
Request Negotiation	RequestID_HLD.xml	