

API MANUAL

N-OPS & CREW

VERSION 22.6.11

2023-09-14

NAVBLUE

AN AIRBUS COMPANY

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1. General

CHAPTER 01

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1.1. Revisions

2016-02-16	1.3.0	- Initial document
2016-09-20	1.4.9	- Changes to GetFlights: <ul style="list-style-type: none"> o ProjectCodes added to FlightRequestData. Setting this to true will return any Project codes assigned to the flight. - SetRosterData added with support for Check In and Check Out times. SetRosterDesignator function will be removed in the future.
2016-09-27	1.4.11	- Changes to GetRosters: <ul style="list-style-type: none"> o FilterId/FilterName can be a HumanResourceFilter RosterFilterId/RosterFilterName has been added so it's possible to filter on both Crew and Activities. o Times added to RosterRequestData Setting this to true will return various times related to the roster activity such as Check in and Check out.
2016-09-27	1.4.12	- Changes to GetRosters: <ul style="list-style-type: none"> o ReferenceActivity added to RosterRequestFilter
2017-01-09	1.4.13	- SetCrewDocument added - SetRoster added - Changes to GetRosters: <ul style="list-style-type: none"> o Notes added to RosterRequestData - User Rights added to all API calls. API users need "Read" rights to use Get functions and "Edit" rights to use Set functions. It is also possible to select a Filter to limit the result. API function - User right - Filter type GetCrews - HRE/HumanResources - Human resource filter GetRosters - HRE/HumanResources - Human resource filter GetRosters - HRE/Roster Filter - Roster filter GetFlights - SCH/Schedules - Leg filter GetSchedules - SCH/Schedules - Leg filter SetCrewDocument - HRE/HumanResources - Human resource filter SetFlightData - SCH/Schedules - Leg filter

		<p>SetRoster - HRE/HumanResources - Human resource filter</p> <p>SetRosterData - HRE/HumanResources - Human resource filter</p> <p>SetRosterDesignator - HRE/HumanResources - Human resource filter</p>
2017-03-10	1.4.15	<ul style="list-style-type: none"> - Changes to GetCrews <ul style="list-style-type: none"> o OnlyActiveCrew and OnlyActiveRecords have been added to Crew Request Filter. Setting OnlyActiveCrew to true will only return crew with valid Base and Rank/Qual compared to ReferenceDate o Setting OnlyActiveRecords to true will only return sub data (Addresses, Phones etc) that are valid compared to ReferenceDate and marked as Active. o Bases, Ranks, Qualifications, SpecialRoles and Contracts have been added o Active, ValidFrom and ValidTo attributes have been added to Addresses, Phones, Emails, Documents (only Active attribute), Bases, Ranks, Qualifications, SpecialRoles and Contracts fields. - Changes to GetRosters <ul style="list-style-type: none"> o Manual Duty Start and Manual Duty End have been added to RosterActivity/Times. - Bug fixes <ul style="list-style-type: none"> o UTC diff is now set correctly on Reference activities o Country is now set correctly on Crew/Address/Country fields o Middle name is now set correctly on Crew o UniqueId is now set correctly on Aircraft o Filters are now working correctly in GetCrews request
2017-08-01	1.4.15.16	<ul style="list-style-type: none"> - SetCrew added
2017-10-06	2.0	<ul style="list-style-type: none"> - GetAccumulatedValues added - Changes to GetMaintenances <ul style="list-style-type: none"> o UniqueId has been added (note that this is used in combination with MaintenanceType) o MaintenanceType has been added, valid values are MAINTENANCE and VEHICLEREFERENCEACTIVITY - Changes to GetRosters <ul style="list-style-type: none"> o A new request filter has been added; OnlyActive. Setting it to true will only include "Active" crew members, setting it to false will include all crew members.

		<ul style="list-style-type: none"> - Bug fixes <ul style="list-style-type: none"> o GetVersion is now returning correct version o GetRoster is now returning correct crew Base. If a crew member is changing base in the requested period both bases will be returned, separated with a comma.
2018-06-25	2.1	<ul style="list-style-type: none"> - SetUser added - SetMaintenance added - SetAircraftData added - GetPairings added - DeleteMaintenance added - Changes to SetCrew - SocialSecurityNumber has been added - SpecialRoles have been added - Changes to SetFlightData - Improved algorithm for finding Leg according to ValidFrom/ReferenceDate (for overmidnight flights) - Changes to SetRoster - Speed up function for longer periods - ActivityType.GROUND has been changed to ActivityType.REFERENCEACTIVITY - Changes to SetCrewDocument - Active has been added - Bug fixes: <ul style="list-style-type: none"> - GetFlights is now returning delay codes - GetAccumulatedValues is now returning calculated negative values - SetRoster, SetRosterDesignator and SetRosterData are now calculating correct period -
2019-01-24	2.2	<ul style="list-style-type: none"> - Added 'Total' value for CompartmentLoad in 'GetFlights'. - Added ASMReasons field for GetFlights function. - added 'ScheduleDepartureAirport' and 'ScheduleArrivalAirport' to the 'GetFlights' request. - CarryIn/CarryOut activities fixed for PBS import. - Added GetAircrafts SetAircraftData (to update MEL List)
2019-04-24	2.3	<ul style="list-style-type: none"> - 'Credit' field has been changed to so it's visible in both 'PairingActivity' and 'RosterActivity' ('GetPairings' and 'GetRosters')
2019-08-28	2.4	<ul style="list-style-type: none"> - Added "Landings" - Number of landings added to "VoyageReport" element.

		<ul style="list-style-type: none"> - Added "PADAmount" - Number of PADs added to "PassengerPerClass" element. - Added "DataElementIdentifiers" to "GetSchedule" function. Used to display RoundTrip data. Enable by setting "DataElementIdentifiers = true" in "ScheduleRequestData". - Added "AircraftConfig", "AircraftOwner", "CockpitCrewOwner", "CabinCrewEmployer" to "Schedule" element in "GetSchedule" function. - Added "Type" and "CrewType" to "Crew" element in "GetCrews" and "GetRosters". Enable "CrewType" by setting "CrewType = true" in "CrewRequestData". - "FlightPlan" added in "SetFlightData". "Callsign", "Route" and "EstimatedElapsedTime" can be set using this function.
2019-11-28	19.8	<ul style="list-style-type: none"> - AuthenticateUser added - DeleteRosters added - "Gate" added to "Airport" elements in "GetFlights" and "SetFlightData" - "Stand" added to "Airport" elements in "GetFlights" and "SetFlightData" - "CO2" added to "Flight" elements "GetFlights" - "CreatedAt" added to "Crew" elements - "ModifiedAt" added to "Crew" elements - "ActivityType" included "UNKOWN" now corrected to "UNKNOWN" - "MaintenanceType" added to "MaintenanceRequestFilter" - "MaintenanceType" included "UNKOWN" now corrected to "UNKNOWN" - "RosterType" included "UNKOWN" now corrected to "UNKNOWN" - "Uniqueld" has been added to "SetFlightData" to uniquely identify a flight leg. - "Airports" has been added to "SetFlightData" to be able to set "Gate" and/or "Stand" -
2020-01-24	19.10	<ul style="list-style-type: none"> - "Comment" has been added to "GetRosters" and "GetPairings"
2020-03-30	20.2	<ul style="list-style-type: none"> - "Jumpseaters" added to FlightRequestData - "Complement" added to "Flight" elements in "GetFlights" - "Jumpseaters" added to "Flight" elements in "GetFlights" - "FuelData" added to "Flight" elements in "GetFlights" - "NickName" added to "Aircraft" elements in "GetFlights", "GetAircrafts" and "GetMaintenances"

		<ul style="list-style-type: none"> - "Name" added to "Aircraft" elements in "GetFlights", "GetAircrafts" and "GetMaintenances" - "CruisingSpeedLevel" added to "Flightplan" elements in "GetFlights" - GetConfigurationData added
2020-06-05	20.4	<ul style="list-style-type: none"> - "Revision" added to "Crew" elements. - "GetCrewRevisions" added. - "SetCrewRevision" added. - "SetExternalCrew" added.
2020-07-17	20.6	<ul style="list-style-type: none"> - "HOTEL_INFO" added to "ConfigurationType" in "GetConfigurationData". - "HotelInfos" added to "ConfigurationData". - "HotelInfoFilter" added to "ConfigurationDataFilter". - "GetAirports" added. - The following has been added to "Airport": LocalName, SlotLevel, DaylightSavingTimes, Timezones, SlotLevels, StationFacilities. - The following has been added to "RosterActivity": Code, TrainingSession, HotelDetail - The following has been added to "RosterRequestData": TrainingSessions, HotelDetails - "Times" added to "SetRosterData" to allow to set any time to a Roster activity. This should be used instead of "RosterTime". - UniqueID in GetRosters has changed to return the RosterID instead of PublishedRosterID, please note that this affects historical GetRosters queries. Please contact Support if there is a need for a historical translation table.
2020-10-21	20.8	<ul style="list-style-type: none"> - UniqueID change from int to string in BasicRequestFilter, note that this field is used in almost all Get functions. - TimeChanges added to Timezone and DaylightSavingTime used in GetAirports - ExternalReferenceId added to MinimumEquipment and Maintenance used in GetAircrafts and GetMaintenances, and SetMaintenance - RefUniqueid and CrewOnBoard added to RosterActivity, used in GetRosters - Uniqueid added to TrainingSession used in GetRosters - HotelPickup added as PickupFrom and PickupTo in HotelDetail used in GetRosters - Credit added to Pairing used in GetPairings - ArrivalDelay1, ArrivalDelay2, ReturnToRampDelay1, ReturnToRampDelay2, ForcedReturnDelay1,

		<p>ForcedReturnDelay2, DivertDelay1 and DivertDelay2 added to Delays used in GetFlights</p> <ul style="list-style-type: none"> - CrewNumber added to CrewRequestFilter used in GetCrews - CrewOnBoard added to RosterRequestData used in GetRosters - GetHotelBookings added - CREW_COMPLEMENT and REFERENCE_ACTIVITY added to GetConfigurationData - CrewComplementFilter and ReferenceActivityFilter added to ConfigurationDataFilter - CrewComplements and ReferenceActivities added to ConfigurationData
2020-01-14	20.10	- No changes
2021-03-30	21.2	<ul style="list-style-type: none"> - UniqueId added to SetRosterData. This can be used to update a specific roster activity if FlightNumber/Callsign/FlightDate/DepartureAirport/ArrivalAirport cannot be used, or for non-flight activities. - DeadHeadBookingNumber added to SetRosterData - DeadHeadBookingNumber added to RosterActivity - DetailedStatus added to FlightRequestData used in GetFlights. This can be used to retrieve all statuses related to a flight. - DetailedStatuses added to Flights used in GetFlights
2021-06-07	21.4	<ul style="list-style-type: none"> - PairingName added to RosterActivity - AIRCRAFT_TYPE added to GetConfigurationData - AircraftTypes added to ConfigurationData - AircraftTypeFilter added to ConfigurationDataFilter - ReasonCategoryFiter renamed to ReasonCategoryFilter
2021-09-06	21.6	<ul style="list-style-type: none"> - GetRosterTransactions added - RosterTransactions added to Crew - State added to Address - DocumentName added to Document - Seniority added to SetCrew
2021-10-11	21.8	<ul style="list-style-type: none"> - GetUsers added - LegalExceptions added to SetRosterData
2022-01-21	21.10	<ul style="list-style-type: none"> - PROJECT added to GetConfigurationData - TRANSACTION_CODE added to GetConfigurationData - IROPSParentId added to Flight
2022-04-13	22.2	<ul style="list-style-type: none"> - Desk added to Flight in GetFlights and SetFlightData - DateOfEmployment and DateOfBirth added to CrewRequestData in GetCrews

		<ul style="list-style-type: none"> - PairingStart and PairingEnd added to RosterActivity in GetRosterTransactions and GetRosters - Active attribute added to GetConfigurationData <ul style="list-style-type: none"> - Project - TransactionCode - Reason - ReasonCategory - CrewComplement - AircraftInstance added to AircraftType in GetConfigurationData
2023-01-04	22.5	<ul style="list-style-type: none"> - AircraftNotes added to SetAircraftData - AircraftNotes added to GetAircrafts - Historical Bases and Availabilities added to GetConfigurationData (AIRCRAFT_TYPE)
2023-01-10	22.6	<ul style="list-style-type: none"> - GetFlights returns LATT values - GetFlights returns ScheduleGCDKM and ScheduleGCDNM - GetCrews returns ExternalAWDCredit - GetRosters returns Array of LATT values - GetRosters identifies if an activity is a carryover activity - GetPairings identifies historical pairings - GetPairings can return Best Start and End Times - New Method: SetPayload - SetRoster(s) includes optional boolean <Confirmed/> to set activity to confirmed on insert
2023-05-04	22.6.5	<ul style="list-style-type: none"> - SetRosters parameter RosterType is Nillable, and by default will return both PUBLISHED and NOT_PUBLISHED activities
2023-09-14	22.6.11	<ul style="list-style-type: none"> - Introduction of new SOAP Endpoint - Development on Legacy SOAP Endpoint discontinued - New Warnings & Errors For Set Methods - HttpStatusCode Responses - City Name added to GetAirports response - Roster Designators added to GetConfigurationData - Leg Legal Exceptions added to GetConfiguration - Roster Legal Exceptions added to GetConfigurationData - Active HR Document List added to GetConfigurationData - HR Types added to GetConfigurationData - Hotel Status added to GetRosters response - Set/GetSub Delay codes via SetFlightData/GetFlights - Leg Legal Exception to SOAP API(GetFlights and SetFlightData) - New Method: GetTurnAroundRules - New Method: SetTurnaroundRules

1.2. Overview

N-OC API is a WSDL/SOAP based interface that can be used to read and insert data to the N-OC system.

The N-OC API is ideal for 3rd party integrations.

As of 22.6.11 a new SOAP endpoint has been introduced:

<https://ALC.noc.navblue.cloud/raidoapi/nocsoapapi.asmx>.

Key Enhancements:

1. This endpoint introduces improved error handling, logging and error responses. When an SOAP request message is processed, the functionality, when compared to the previous version, is the same except the response contains error/warning messages when applicable.

2. HTTPStatusCode is returned in the response.

1.3. API Functions

1.3.A. Authenticate User

This function can be used to authenticate a N-OC user.

Username & Password is the user with API access. SystemUser & SystemPassword is the user to check.

User right (Read): SYSM/Users

1.3.B. DeleteMaintenance

This function can be used to remove existing VehicleReferenceActivity.

User right (Delete): VEH/Vehicle Reference Activity

1.3.C. DeleteRosters

This function can be used to remove a REFERENCEACTIVITY from a Roster.

User right (Delete): HRE/Roster Filter

1.3.D. GetAccumulatedValues

Returns accumulated values ("legality") for Human Resource (Crew) or Vehicle (Aircraft).

FilterId/FilterName can be a Human Resource or Vehicle Filter from N-OC.

RemoveEmpty (optional) defines if empty values shall be sent in response.

Labels defines list of labels to collect, can be e.g. "BLH", "Duty" or aggregate like "BLH, Duty"

AggregateDays (optional) defines aggregate days to calculate, if not defined - response is splitted into 1-day periods, if passed "-1" - entire "From" - "To" is calculated

Type defines type of data to collect; currently two values are available: HumanResource and Vehicle

User right (Read): HRE/Accumulated Values

1.3.E. GetAircrafts

Returns the Aircraft available in N-OC, with options to return MELs and Aircraft notes.

User right (Read): VEH/VehicleResource

1.3.F. GetAirports

Returns the Airports available in N-OC.

User right (Read): PLAC/Stations

1.3.G. GetCrewRevisions

Returns all current revisions for a crew member.

User right (Read): HRE/Revision

1.3.H. GetConfigurationData

Returns basic data available in N-OC, the following "Configuration Types" are currently supported:

REASON
 REASON_CATEGORY
 HOTEL_INFO
 CREW_COMPLEMENT
 REFERENCE_ACTIVITY
 AIRCRAFT_TYPE
 PROJECT
 TRANSACTION_CODE
 HR_TYPE
 ROSTER_DESIGNATORS
 ROSTER_LEGAL_EXCEPTION
 LEG_LEGAL_EXCEPTION
 HR_DOCUMENT_LIST

1.3.I. GetCrews

Returns Crew data from N-OC.

Addresses type=s:boolean
 Phones type=s:boolean
 Emails type=s:boolean
 Documents type=s:boolean
 Bases type=s:boolean
 Ranks type=s:boolean
 Qualifications type=s:boolean
 SpecialRoles type=s:boolean
 Contracts type=s:boolean
 CrewType type=s:boolean
 DateOfEmployment type=s:boolean
 DateOfBirth type=s:boolean

User right (Read): HRE/HumanResources

1.3.J. GetFlights

Returns flight leg information from N-OC.

Uniqueld type=s:int
AirlineCode type=s:string
ICAOAirlineCode type=s:string
FlightNumber type=s:int
Suffix type=s:string
DepartureAirportCode type=s:string
ArrivalAirportCode type=s:string
DiversionAirportCode type=s:string
FlightDate type=s:dateTime
STD type=s:dateTime
STA type=s:dateTime
AircraftRegistration type=s:string
ServiceTypeCode type=s:string
OnwardAirlineCode type=s:string
OnwardFlightNumber type=s:int
OnwardSuffix type=s:string
Status type=s:string
Type type=s:string
Canceled type=s:boolean
DepartureLocalTimeDiff type=s:int
ArrivalLocalTimeDiff type=s:int
IROPSParentId nillable=true type=s:int
ASMReasons type=s:string
Complement type=s:string
CO2 type=s:decimal
ScheduleGCDKM type=s:double
ScheduleGCDNM type=s:double
Aircraft type=tns:Aircraft
Airports type=tns:Airports
CrewOnBoard type=tns:ArrayOfCrewOnBoard
Delays type=tns:Delays
Flightplan type=tns:Flightplan
Fuels type=tns:ArrayOfFuel
Loads type=tns:Loads
Notes type=tns:ArrayOfNote
Times type=tns:ArrayOfTime
Latts type=tns:ArrayOfLatt
Roundtrip type=tns:Roundtrip
ProjectCodes type=tns:ArrayOfProjectCode
LegalExceptions type=tns:ArrayOfLegLegalException
Jumpseaters type=tns:ArrayOfJumpseater
FuelData type=tns:FuelData
DetailedStatuses type=tns:ArrayOfString
Desk type=s:string

User right (Read): SCH/Schedules

1.3.K. GetHotelBookings

Returns Hotel Status

name=Start type=s:dateTime
name=End type=s:dateTime
name=HotelName type=s:string
name=HotelUniqueld type=s:int
name=EmpNo type=s:string
name=PickupsFrom type=tns:ArrayOfPickup
name=PickupsTo type=tns:ArrayOfPickup
name=BookingDatas type=tns:ArrayOfBookingData

1.3.L. GetMaintenances

Returns Maintenance activities from N-OC.

Uniqueld type=s:int
ExternalReferenceld type=s:int
MaintenanceType type=tns:MaintenanceType
Type type=s:string
AirportCode type=s:string
StartDateTime type=s:dateTime
EndDateTime type=s:dateTime
AircraftRegistration type=s:string
Name type=s:string
Aircraft type=tns:Aircraft
Airport type=tns:Airport
Notes type=tns:ArrayOfNote
Times type=tns:ArrayOfTime

1.3.M. GetPairings

Returns Pairings activities from N-OC.

Uniqueld type=s:int
Name type=s:string
Start type=s:dateTime
End type=s:dateTime

Base type=s:string
StartBaseTimeDiff type=s:int
EndBaseTimeDiff type=s:int
Complement type=s:string
Qualification type=s:string
PairingClass type=s:string
Credit type=s:int
PairingActivities type=tns:ArrayOfPairingActivity
AssignedCrews type=tns:ArrayOfAssignedCrew
ComplementDescriptions type=tns:ArrayOfComplementDescription

1.3.N. GetRosters

Returns roster data for crew members.

Active type=s:boolean
Uniqueld type=s:int
Number type=s:string
Code1 type=s:string
Code2 type=s:string
Firstname type=s:string
Middlename type=s:string
Lastname type=s:string
Nickname type=s:string
Gender type=s:string
Seniority type=s:int
Base type=s:string
Rank type=s:string
Qualification type=s:string
Type type=s:string
CreatedAt type=s:dateTime
ModifiedAt type=s:dateTime
RosterActivities type=tns:ArrayOfRosterActivity
DateOfEmployment type=s:dateTime
DateOfBirth type=s:dateTime

User right (Read): HRE/HumanResources, HRE/Roster Filter

1.3.O. GetRosterTransactions

Returns roster transactions for crew members.
FilterId/FilterName can be a Human Resource Filter from N-OC.

From/To is the period where you have the roster activities, this can be the roster period or any custom period.

TransactionFrom/To is the period where the roster transaction (create, modify, delete, publish) occurred, the idea is to have a short period here and query the function often to keep the client system in sync.

Uniqueld can be a single Human Resource id, if not set all Human Resources will be returned.

In the reply you will find two status fields in each transaction: IsOriginal & IsReleased

IsOriginal is true only for the activities that were on the roster at roster publication. This is the original published roster.

IsReleased is true for the activities that have been created/changed/deleted on or after the roster has been published. Changes to a published roster.

Uniqueld type=s:int
Timestamp type=s:dateTime
ValidFrom type=s:dateTime
ValidTo type=s:dateTime
CreatedByUniqueld type=s:int
Status type=s:string
RevisionNumber type=s:int
ChangeType type=s:string
TransactionCode type=s:string
IsOriginal type=s:boolean
IsReleased type=s:boolean
ConfirmedDate type=s:dateTime
RosterActivities type=tns:ArrayOfRosterActivity

User right (Read): HRE/HumanResources, HRE/Roster Filter

1.3.P. GetSchedules

Returns Flight Schedule data (SSIM).

Uniqueld type=s:int
AirlineCode type=s:string
ICAOAirlineCode type=s:string
FlightNumber type=s:int
Suffix type=s:string
DepartureAirportCode type=s:string
ArrivalAirportCode type=s:string
PeriodStart type=s:date
PeriodEnd type=s:date
Frequency type=s:string
WeekFrequency type=s:int

STD type=s:int
STA type=s:int
ServiceTypeCode type=s:string
OnwardAirlineCode type=s:string
OnwardFlightNumber type=s:int
OnwardSuffix type=s:string
Type type=s:string
AircraftType type=s:string
AircraftVersion type=s:string
AircraftConfig type=s:string
DepartureLocalTimeDiff type=s:int
ArrivalLocalTimeDiff type=s:int
AircraftOwner type=s:string
CockpitCrewEmployer type=s:string
CabinCrewEmployer type=s:string
Airports type=tns:Airports
Notes type=tns:ArrayOfNote
DataElementIdentifiers type=tns:ArrayOfDataElementIdentifier

User right (Read): SCH/Schedules

1.3.Q. GetTurnAroundData

Returns TurnAround Rules data

Name type=s:string
ArrivalActivityFilter type=s:string
DepartureActivityFilter type=s:string
Minutes type=s:int
Priority type=s:int
Active type=s:boolean
ValidFrom type=s:dateTime
ValidTo type=s:dateTime
Frequency type=s:string

User right (Read): TurnAroundRules

1.3.R. GetUsers

Returns N-OC users

User right (Read): SYSM/Users

1.3.S. GetVersion

Returns the version number of the API

1.3.T. Ping

Tests the connection to the API

1.3.U. SetAircraftData

This function can be used to update Aircraft properties.

User right (Edit): VEH/Vehicles

Used to set MinimumEquipmentList and AircraftNotes update is supported

1.3.V. SetCrew

Creates or Modifies a crew member.

Username type=s:string
Password type=s:string
EmployeeNumber type=s:string
FirstName type=s:string
MiddleName type=s:string
LastName type=s:string
NickName type=s:string
SocialSecurityNumber type=s:string
ShortCode1 type=s:string
ShortCode2 type=s:string
BirthDate type=s:dateTime
Gender type=s:string
Type type=s:string
Active type=s:boolean
Groups type=s:string
Seniority type=s:int
Bases type=tns:ArrayOfBase
QualRankData type=tns:ArrayOfQualRank
Phones type=tns:ArrayOfPhone
Addresses type=tns:ArrayOfAddress
Emails type=tns:ArrayOfEmail
Documents type=tns:ArrayOfDocument
ContractsData type=tns:ContractsData
SpecialRoles type=tns:ArrayOfSpecialRole
SystemUser type=s:string

1.3.W. SetCrewDocument

Updates one or several documents for a crew member.

Below is a sample call that updates the SEC Expiry date and PASS Number and Expiry date for crew member ABC.

CrewNumber and Document/Code are mandatory. If the document does not exist a new document will be created.

CrewNumber type=s:string
Documents type=tns:ArrayOfDocument

User right (Edit): HRE/HumanResources

1.3.X. SetCrewRevision

Confirms revisions for a crew member.

User right (Edit): HRE/Revision

SetExternalCrew

If N-OC is configured without crew rosters it is possible to set Crew on board data using this method.

User right (Create or Edit): HRE/Crew On Board

1.3.Y. SetMaintenance

This function can be used to insert and update VehicleReferenceActivity.

User right (Edit): VEH/Vehicle Reference Activity

Attention: for the time being only MaintenanceType.VEHICLEREFERENCEACTIVITY is supported.

1.3.Z. SetPayload

This function can be used to insert and update load data for a flight leg.

User right (Edit): SCH/Schedules

Load Types

BookedPassengerPerWeight

ActualPassengerPerWeight

BookedPassengerPerClass

ActualPassengerPerClass

BookedDeadload

ActualDeadload

1.3.AA. SetFlightData

This function can be used to insert and update flight leg data.
User right (Edit): SCH/Schedules

Time Types

ActualBlockOff
ActualBlockOffCOR
ActualBlockOn
ActualEngineOff
ActualEngineOn
ActualStartTaxiFromGate
ActualTakeOff
ActualTouchDown
ApproachStarted
CrusingStarted
EstimatedBlockOff
EstimatedBlockOn
EstimatedStartTaxiFromGate
EstimatedTakeOff
EstimatedTouchDown
ETOPSEntry
ETOPSExit
EurocontrolCTOT
EurocontrolEOBT
Movementafterpushback
NextInfo
PassengerEndTime
PassengerStartTime
PushBackStarted
ReclearanceInfo
Return_From_Airborne
Return_To_Ramp
SELCALConfirmed
TaxiToGateEnd
TSAT
VoyageBlockOff
VoyageBlockOn
VoyageEngineOff
VoyageEngineOn
VoyageTakeOff
VoyageTouchDown

Fuel Types

Defuel
FuelArrival
Fuelburn
FuelOnboard
MaintenanceConsumption
MaxWeightForZeroFuelWeight
RampWeight
Remaining
TakeOffFuel
TripFuel
Uplift
ZeroFuelWeight

Fuel Sources

BatchImport
FlightPlan
FMM
LoadSheet
ManualEdit
MVT
VoyageReport

Fuel Units

Gallons
Kgs
Lbs
Litres
Tons

Fuel Density units

Kg/m3
Kg/l
Kg/usg

1.3.BB. SetRoster(s)

Inserts one or several activities to a crew member's roster. Currently only Ground activities and Pairings are supported.

User right (Edit): HRE/HumanResources

PBS import:

When calling SetRosters we have two options to control what we should with existing activities N-OC.

- Override
 - o All activities are removed for the period specified in the XML data to the API. Possible to set CarryIn/CarryOut options in the XML data, typically keep carry-in and remove carry-out.
 - o By defining a filter (Roster or Roster block) it's possible to keep activities and/or pairings and ignore them in the XML data.
 - o With override we can import multiple solutions for the same period, as long as we get the same crew members in the first and second XML data.

- Merge
 - o Activities are not removed for the period specified in the XML data to the API. Carry-in and carry-out options are ignored.
 - o All XML data will be imported "on top of" the existing rosters in N-OC except if start, end and activity code are the same. In this case we keep the original activity in N-OC and ignore the one in the XML data.
 - o Merge can't be used to re-import data for the same period.

We recommend to we use the first option with a roster filter covering all training activities (and other activities that should be kept in N-OC and ignored in the XML data). It is important to keep this filter up to date.

You can try this by doing the following:

Add some test activities to an unpublished crew roster in February.

Create a roster filter that matches those activities.

Update the "RosterImportMode" to Override and "Exclude Roster Filter" to the newly created filter.

Call the SetRosters API with the same crew members and period as in step 1.

Check N-OC to see that the original activities are still there.

1.3.CC. SetRosterData

This function can be used to insert and update the following Roster data:

RosterDesignators and Check In/Out times.

User right (Edit): HRE/HumanResources

Time types:

ActualCheckIn

ActualCheckOut

CalculatedCheckIn

CalculatedCheckOut

CalculatedUnionCheckIn

CalculatedUnionCheckOut
DutyStart
DutyEnd
ManualCheckIn
ManualCheckOut
RestBeforeStart
RestBeforeEnd
RestAfterStart
RestAfterEnd
TripStart
TripEnd
UnionCheckIn
UnionCheckOut
ManualDutyStart
ManualDutyEnd
LastOnChoxUTC

1.3.DD. SetTurnAroundRule

This function can be used to insert and update TurnAround Rules

name=Name type=s:string
name=ArrivalActivityFilter type=s:string
name=DepatureActivityFilter type=s:string
name=Minutes type=s:int
name=Priority type=s:int
name=Active type=s:boolean
name=ValidFrom type=s:dateTime
name=ValidTo type=s:dateTime

1.3.EE. SetUser

This function can be used to insert and update a new N-OC user.

Username type=s:string
Password type=s:string
SystemUser type=s:string
SystemUserPassword type=s:string
FirstName type=s:string
LastName type=s:string
Email type=s:string
TypeB type=s:string
Phone type=s:string

Mobile type=s:string
VOIP type=s:string
ADUser type=s:string
Active type=s:boolean
Groups type=s:string

User right (Edit): SYSM/Users

1.4. Samples

Please contact NAVBLUE Support if you need any sample code. The latest WSDL can be found at <https://ALC.noc.navblue.cloud/raidoapi/nocsoapapi.asmx?WSDL> or by contacting NAVBLUE Support.