		occur)
-2	Invalid Password	The supplied password is incorrect.
-1	Bad User Password or Locked Out	The password is incorrect or the account is disabled.

33.4 OMS Public API

OMS includes a public API in the form of a Windows Communication Foundation (WCF) service ("web service") that may be used by 3rd party developers. In its current form it includes methods related to performing rates quotes, querying Agency details and submitting membership application transactions.

Note for HAMBS staff:

For internal development and testing of the API at HAMBS there is information available to developers and testers on our internal wiki.

http://wiki.hambs.com.au/index.php/OMS Public API

33.4.1 Prerequisites

SERVICE CONFIGURATION

The API is deployed and hosted as part of the OMS web site. The API Service is dependent on a number of OMS and HAMBS libraries included in the web site and are therefore provided as part of one package. The Service also leverages DNN authentication and role management provided within OMS. The Service must be correctly configured within the web.config of the OMS website - contact your hosting provider and/or Service Desk for assistance.

CERTIFICATE

The Service is provided using Transport and Message security which means that a certificate is used to secure the Transport layer and user authentication (username and password) are used in the Message layer.

A certificate must be installed for the site that is hosting the service. Because OMS also requires a certificate this should have been provided as part of the OMS website installation. Self-signed certificates can be used for test environments.

USER ACCOUNT FOR API ACCESS

A user account must be created and configured within OMS and allocated the correct role. The username and password of this account must be given to the developer by the fund.

To create the DNN user account execute the following steps:

- 1. Login to OMS as Administrator
- 2. Select Admin > User Accounts > Add New User
- 3. A new user needs to be added for each client that will be using the API, this will ensure the each client can be provided access only to the relevant OMS/API functions
- 4. Once added select the edit account icon 🥒
- 5. For the account click "Manage Roles for this User"
- 6. Choose the appropriate API role(s) from the Security Role dropdown enter an Effective date and Expiry date and then click Add Role 🖶

The API DNN roles that users can be allocated to are:

- RateQuotes this provides access to all rates quote related methods
- Agencies this provides access to agency and commission related methods
- AgentMemberApplication allows agents to create membership applications
- SubmitMembershipTransaction this provides access to submit membership applications. Note that this will only create "pending" transactions in HAMBS regardless of the STP value.
- MembershipApplication provides access "Submit Membership Transaction Using STP"method which creates new memberships as per the STP value set in HAMBS ie. Applied/Pending/Declined.
- MembershipApplicationLookup this role provides access to the lookup methods related to the new membership application e.g. titles, relationship, previous health fund, rank etc.

If these roles are not available in your OMS Environment please contact the Service Desk for assistance.

BUSINESS RULES

It is the fund's responsibility to explain the required business rules and business concepts to any 3rd party developer that needs to use the API, as these will differ between each fund.

The fund should ensure that the developer understands required concepts such as Membership Classes, Hospital Sets, Ancillary Sets, Rates Quotes, Frequencies, Membership Conditions, Locations, Sites, Groups, Branches, Agencies, Agency commissions, Eligibility Reasons and anything else relevant to the development that is being undertaken.

CLIENT CAPABILITIES

The service is provided with a wsHTTPBinding, ie SOAP 1.2 with ws-* security. If access over SOAP 1.1 and basicHTTPBinding is required please contact the Service Desk to discuss.

DEVELOPER DOCUMENTATION

Details about how to connect to and use this API is provided in this document. Examples provided are only for .NET development but it is possible to connect to the web service from other environments that support SOAP – see Client Capabilities above.

In addition a reference in Microsoft Help Topics style is available for developers in a file called HSL.OMS.Public.Documentation.chm

The latest version of the file can be requested from the Service Desk.

For the Service Desk: The help file is located <u>here</u>

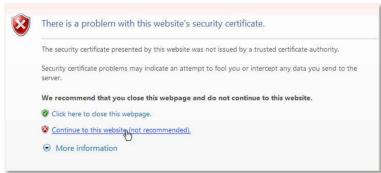
33.4.2 Getting Started

Install certificate for client user

The Service must be accessed over https which means that a certificate is installed on the server. When using the Service on a site with a self-signed certificate (ie nonproduction sites) the certificate is not automatically trusted by the client. Therefore the certificate must first be installed on the client machine. This is most easily achieved through Internet Explorer.

1) Browse to the relevant OMS website eg https://oms170ga.hambs.com.au/

2) If a certificate has not been installed you will see this warning. Click Continue to this web site



3) To install the certificate click the Certificate Error in the Navigation Bar. Then click View Certificates, and then Install Certificate.







4) Go through the Wizard and install the certificate in the Trusted Root Certification Authorities store.











5) Restart your browser and navigate to the site again to confirm that the certificate has been successfully installed. When arriving at the site you should not get the warning shown in step two. Instead you should see the Padlock in the navigation bar indicating that the site is now trusted.

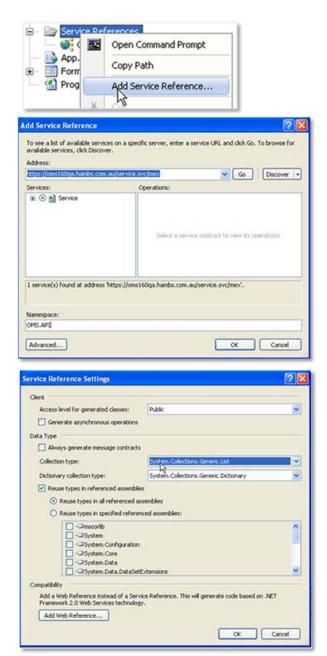


Create a proxy through Visual Studio

In Visual Studio add a Service reference for https://<url>/service.svc and create a proxy. Replace <url> with the address of your OMS web site.

As part of the process

- 1) Select your preferred namespace e.g. OMS.API
- 2) Under advanced setting set Collection Type to System.Collections.Generic.List



Use the service client in code

Example code

```
ServiceClient client;
client = new ServiceClient();
client.ClientCredentials.UserName.UserName = "UserName";
client.ClientCredentials.UserName.Password = "Password";
client.Open();
```

The Username and passwords should be provided to the developer by the fund - see Prerequisites above.

Use any of the methods e.g.

```
List<MembershipClass> membershipClasses =
client.MembershipClasses(effectiveDate);
```

Close the client when done

```
client.Close();
```

33.4.3 Rates Quote

To perform a Rates Quote a number of parameters are required. The other methods in the interface provide support for retrieving valid values for the Rates Quote Parameters.

The Rates Quote methods will return a list of quotes - one for each contribution frequency, eg Monthly, Quarterly, and Yearly. The Rates Quote returned will include the Fund Dissection details for each frequencies returned

Result Result: Frequency ID: Wkly Frequency: Weekly Gross Amount: \$103.14 Net Amount: \$78.03 Rebate Amount: \$33.45 Rebate Level: 30% Loading Amount: \$8.34 Loading Rate: 11.00% Priority: 0 --- Hospital Component---Gross Amount: \$75.84 Net Amount: \$58.92 Rebate Amount: \$25.26 Rebate Level: 30% Loading Amount: \$8.34 - Ancillary Component-Gross Amount: \$27.30 Net Amount: \$19.11 Rebate Amount: \$8.19 Rebate Level: 30% Loading Amount: \$0.00 Frequency ID: Fnght Frequency: Fortnightly Gross Amount: \$206.28 Net Amount: \$156.06 Rebate Amount: \$66.90

The flow of data collection may vary depending on the business requirements of the module being developed. In the OMS Rates Quote module the data is collected in the following order

- Effective Date
- Membership Class
- Hospital Set
- Ancillary Set
- Product
- Birth date/s and LHC loading information
- Rebate Information
- Quote

Detailed developer documentation for each method and its parameters is available in the help file (see below)

Some of the Rates Quote methods have 'WithConditions" at the end of the method name. These should be used when the fund uses membership conditions to restrict access to selected rates.

Example. This code snippet shows how to retrieve a list of hospital sets with and without conditions.

List<ProductSet> hospitalset;

```
if (WithConditions)
      HospitalProductSetParams oparams = new HospitalProductSetParams
            {
                  EffectiveDate = this.EffectiveDate,
                  StateId = this.State,
                  MembershipClassId = this.MembershipClass,
                  LocationId = this.LocationId,
                  SiteId = this.SiteId,
                  MemberNo = this.MemberNo,
                  EligibilityReasonID = this.EligibilityReasonId,
                  EligibilitySubReasonID =
            this.EligibilitySubReasonId
            };
      hospitalset =
      client.HospitalProductSetsWithConditions(oparams);
}
else
{
      hospitalset = client.HospitalProductSets(EffectiveDate,
      State, MembershipClass);
}
```

33.4.4 ListRateScales

The ListRateScales(string sisCode1, string sisCode2) method allows the RateScales to be listed based on the SIS Code 1 and SIS Code 2 supplied.

33.4.5 Submit Membership Transaction (Brokers/Agents)

The SubmitMembershipTransaction(string xml, string BrokerID) method allows for a membership application to be submitted to the HAMBS application.

This method creates "Pending" transactions in HAMBS Membership > Membership Web Services, regardless of whether the Fund has chosen straight through processing or not (in HAMBS system parameters).

The transaction data is submitted in the form of XML. This XML needs to comply with the schema for this transaction.

TRANSACTION SCHEMA

The schema is defined in the file MemberServices.xsd. This file can be downloaded from the relevant OMS website: https://<url>/MemberServices.xsd

	Field	Description	Format	Mandatory?	Possible values
Submitted					
Ву					

	Field	Description	Format	Mandatory?	Possible values
	SubmittedBy	Identifies		No	Agent
		who is			Membr
		submitting			
		the			
		membership			
		application.			
		If the value is			
		'agent', it			
		indicates			
		that the			
		member			
		needs to			
		confirm their			
		rebate			
		details (from			
		a pop-up)			
		when they			
		log in to OMS			
		for the first			
		time (also			
		see <i>Rebate</i>			
		Confirmation			
		Module in			
		this guide).			
Person		, . ,			
	PersonId	Identifier for		Yes	0
		the person -			
		should			
		always be set			
		to 0 for all			
		persons			
	EffDate	This should	yyyy-mm-dd	Yes	
		be set to the			
		membership			
		join date			
	Relationship	The person's		Yes	Baby = Baby
	,	relationship			Dtr = Daughter
		to the			FDtr = Foster
		member. For			Daughter
		the member			Fson = Foster
		person this			Son
		should			Membr =
		always be set			Member
		to 'Membr'			Other = Other
					(adult)
					dependant
					Ptnr = Partner
					Son = Son
					Sps = Spouse
L	<u> </u>	1	I	1	

Field	Description	Format	Mandatory?	Possible values
Title	Person's title		No	Dr = Doctor EST = Estate of the Late Master = Master Miss = Miss Mr = Mr Mrs = Mrs Ms = Ms Prof = Professor Rev = Reverend
Firstname	Person's first		Yes	Sir = Sir Sr = Sr
Tilgename	name		163	
SecondName	Person's second name		No	
Surname	Person's surname (last name)		Yes	
Postnominals	The person's postnominals (if any).		No	
Gender	Person's gender		Yes	F = Female M = Male
PIN	Membership's password for login to online member services - this field can only be set on the member person (main applicant)	6-20 characters	No	
Birthdate	Persons date of birth	yyyy-mm-dd	Yes	
MediCardNo	Ten digit medicare card number		No	
MediCardSubnu merate	Number of the person on the card		No	
MediCardExpDat e	Card expiry date	yyyy-mm-dd	No	
MediCardFirstNa me	First name on card		No	

	Field	Dagarindia	Famurat	D.Co. olata	Daniblambur
	Field	Description	Format	Mandatory?	Possible values
	MediCardSecond	Second name		No	
	Name	on card		No	
	MediCardSurna	Last name on		No	
	me	card			
	FullTimeStudent	Is this person		No	true / false
		a full time			
	551	student?			
	EDInstitutionNa	Name of		No	
	me	Education			
		institution			
		for full time			
	5 14 11	student			
	EmailAddress	Person's		No	
		personal			
		email			
	5 6 . 1.	address			
	PreexistingCondi	Not used		No	
	tions				
	Transferring	Is the person		No	true / false
		transferring			
		from another			
	5 . 5 .	fund?			6
	PreviousFund	Previous		No	See
		fund code			PreviousFund
	Duna da confermada da	N.4 I		NI -	table
	PreviousFundMe	Member		No	
	mberNo	number at			
		previous			
	Danida va Francis	fund		No	
	PreviousFundCov	Name of		No	
	er	cover at			
		previous			
		fund - free			
<u> </u>	Drovious Front D-+	text	10001 peres alal	No	
	PreviousFundDat	Date person	yyyy-mm-dd	No	
	eJoined	joined their			
		previous			
	Danie ve Francis de la	fund		No	
	PreviousFundDat	Date person	yyyy-mm-dd	No	
	eCeased	left their			
		previous			
		fund			

Field	Description	Format	Mandatory?	Possible values
IsMember	Is this the member person (main applicant)? Should be set to true for the member person - does not need to be set for other persons		No	true / false
HasCoverVariatio n	Indicates whether the person has a cover variation or not		No	true / false
JoinDate	This should be set to the membership join date	yyyy-mm-dd	No	
LifetimeHealthCo verLoading	Allows setting of LHC values (as seen in HAMBS > Maintain Membershi p person)		No	
LHC Loading sub- heading: EntryAge	Age of the person for LHC loading purposes	99 (two numeric digits)	Yes if LHC Loading section exists	30-99
LHC Loading sub- heading: AbsenseDays	Number of days the person has not held hospital cover since the 1 st July following their 31 st birthday	Numeric	No	Zero or a positive integer

Field	Description	Format	Mandatory?	Possible values
LHC Loading sub- heading: Override	Is the LHC loading to be overridden?	Boolean	No	true/false
LHC Loading sub- heading: EntryAgeExempt	Is the person exempt from the Entry Age conditions?	Boolean	No	true/false
LHC Loading sub- heading: PreviousFundPai dHospitalDays	Number of days paid for a person as benefits from a previous fund	Numeric	No	Zero or a positive integer
Properties	Fund (User) defined properties - these can be used to capture any data that cannot be captured elsewhere. The Fund will need to define the name of each property to be used. They need only be saved for the member person.		No	
Name	Property Name		No	
Value	Property value entered by user		No	
1				

	Field	Description	Format	Mandatory?	Possible values
Contacts > Address					
	Code	Define the type of address, eg H= Home	1 character	Yes	H = Home P = Postal
	EffDate	Effective date for the address - should be set to the membership join date	yyyy-mm-dd	Yes	
	Overseas	Indicates whether this is an overseas address.		Yes	true/false
	Line1	Address line 1		Yes	
	Line2	Address line 2		No	
	Line3	Address line 3 - only used for overseas addresses		No	
	Locality	Suburb - only used for domestic addresses - mandatory for domestic address		No	
	State	Domestic address state - Mandatory for domestic address	Min 2 char max 3	No	ACT = Australian Capital Territory NSW = New South Wales NT = Northern Territory QLD = Queensland SA = South Australia TAS = Tasmania VIC = Victoria WA = Western Australia

	Field	Description	Farment	D.C. watstaw. 2	Possible values
	Postcode	Domestic address postcode - mandatory for domestic address	Format Numeric 200 to 9999	Mandatory?	Possible values
Contacts > Phone					
· iioiic	Code	Type of phone number	1 character	No	H = Home Phone M = Mobile Phone W = Work Phone X = Home Fax Y = Work Fax
	Number	Phone number	Min 8 char max 15	No	
Contacts					
	EmailAddress	Membership' s Contact email address		No	
	CorrMethID	Corresponde nce method id		Yes	Always set to 'Mail'
	IsSendEmail	Member has consented to receive information via email - only set to true if member is asked the question and consents otherwise always send false		Yes	true/false
Communica	tionPreferences				
		Optional elements not required			
Cover					

Field	Description	Format	Mandatory?	Possible values
EffDate	Effective	yyyy-mm-dd	Yes	
	date of the	,,,,		
	cover -			
	should be set			
	to the			
	membership			
	join date			
Class	3 fields for	max 5 char	No	Sgl = Single
	cover			Fam = Family
	selection			SPFam = Single
	option 1			Parent
				Cpl = Couple
	Used in			2PNoA = 2+
	combination			Persons No
	with			Adults
	CoverType			3Adlt = 3+
	and			Adults
	ProductSelec			FamX = Family -
	tion by			extended
	HAMBS to			SPFaX = Single
	determine			Parent -
	Product rate			extended
	scale.			SgIV = Single -
				variation
				FamV = family
				variation
				ChldV =
				Children-
Covertina	Turne of course		Na	Variation
CoverType	Type of cover selected		No	H = Hospital
	selected			A = Ancillary C = Combined
ProductSelection	Product ID	min 1 char	No	Fund's Product
	selected	max 10		IDs
AccountIgnored	Set to false		No	true/false
 Benefit	Method of		No	Chq = Cheque
PaymentMethod	payment of			D/Cr = Direct
	benefits			Credit
	selected by			
	customer			

	Field	Description	Format	Mandatory?	Possible values
	CoverRate Selection	Single field preferred option for cover selection Product rate scale code If used set CoverType and ProductSelec tion to string "BLANK"		No	Fund's Product Rate Scale IDs
Cover > Account		Account is only specified if BenefitPaym entMethod = D/Cr This is the account that benefits will be paid into.			
	AccountType	Type of account in this case would be credit (for Benefit Payments)		No	credit
	DebitCreditID	Debit or Credit class		Yes	Bank = Bank Account C/U = Credit Union Cbank = Direct Credit Bank Account B/Soc = Building Society
	BSB	BSB number of bank account (if chosen)	7 characters '000-000'	No	
	InstitutionName	Bank name		No	

	Field	Description	Format	Mandatory?	Possible values
	ExpiryMonth	Month of	2 characters	No	
		expiry of			
		account			
	ExpiryYear	Year of	min 2 max 4	No	
		expiry of			
		account			
	AccountNumber	Bank account		Yes	
	A + N	number			
	AccountName	Bank account		Yes	
		name			
Contributi					
ons					
Ulis	DirectDebit	Will member		Yes	true/false
	Contrib	pay		163	truc/ruisc
	Payments	contributions			
		by Direct			
		Debit?			
	EffDate	Effective	yyyy-mm-dd	No	
		date of direct			
		debit - set to			
		Membership			
		join date			
	ContribFreq	Selected		No	4Wkly = 4
		contribution			Weekly
		frequency			Bimth = Bi
					Monthly
					Fnght =
					Fortnightly 6Mtly = Half
					Yearly
					Mtly = Monthly
					Qtly = Quarterly
					Wkly = Weekly
					Yrly = Yearly
	Rebate	Customer		No	true/false
		wishes to			
		apply for			
		Federal			
		Government			
		30% rebate			
Contribut					
RebateTic	1	7.00			
	EffDate	Effective	yyyy-mm-	Yes	
		date of	dd		
		rebate tier			
		nomination			

	Field	Dagarintian	Farmet	Dun data wa	Dansible velves
	Field	Description	Format	Mandatory?	Possible values
	Tier	Nominated		Yes	0 = No Tier
		rebate tier level			1 = Tier 1
		10 7 01			2 = Tier 2
					3 = Tier 3
	EligibleMedicar e	Member is eligible for medicare		No	true/false
	DebitOnDate	Date of first direct debit	yyyy-mm-dd	No	
Contributio	ns > Account				
	DebitCreditID	Direct Debit class		Yes	Amex = American Express Bank = Bank Account C/U = Credit Union Mcard = Mastercard Visa = VISA B/Soc = Building Society Diner = Diners club card
	BSB	BSB number of bank account (if chosen)	7 characters	No	
	ExpiryMonth	Month of expiry of charge card (if chosen)	2 characters	No	
	ExpiryYear	Year of expiry of charge card (if chosen)	min 2 max 4	No	
	AccountNumber	Credit card or bank account number		Yes	
	AccountName	Credit card or bank account name		Yes	

	Field	Description	Format	Mandatory?	Possible values
Members	ricia	Description	ronnac	Managery.	1 ossible values
hip					
Membershi	p > Group			No	
	EffDate	Effective	yyyy-mm-dd	No	
		date for the			
		group -			
		should be set to the			
		membership			
		join date			
	GroupID	ID code of		No	Funds to
		group fund			provide broker
		requires new			with the
		member to join to			GroupID to use if required
	PayrollNo	Pay roll		No	ii requireu
		number of			
		customer (if			
		payroll			
		group)			
		probably not required in			
		this case			
Membershi	Membership > Branch			No	
EffDate		Effective	yyyy-mm-dd	No	Fund to provide
		date for the			broker with the
		Branch -			BranchID to use
		should be set to the			if required
		membership			
		join date			
	BranchID	ID code of		No	
		branch fund			
		requires new member to			
		join to			
Membershi	p > Agency	join to		No	
-	EffDate	Effective	yyyy-mm-dd	No	
		date for the			
		Agency -			
		should be set			
		to the membership			
		join date			
L	<u> </u>	1 -	1	1	

	Field	Description	Format	Mandatory?	Possible values
	AgencyID	ID code of agency fund requires new member to join to		No	Fund to provide broker with the AgencyID to use if required
Members hip > Site				No	
	EffDate	Effective date for the Site - should be set to the membership join date	yyyy-mm-dd	No	
	LocationID	ID code of location fund requires new member to join to		No	Fund to provide broker with the LocationID to use if required
	SiteID	ID code of site fund requires new member to join to		No	Fund to provide broker with the SiteID to use if required

Previous Fund Selection

ID	Name
ACA	A.C.A. Health Benefits Fund
AHBS	Defence Health Ltd
AMA	A.M.A. Health Fund Limited
AU	Australian Unity Health Limited
CBHS	CBHS Friendly Society Limited
CDH	Cessnock District Health Benefits Fund Limited
CUA	Credicare Health Fund Limited
AHM	Australian Health Management Group Limited
GMF	Goldfields Medical Fund (Inc.)
GMHBA	GMHBA Limited
GU	Grand United Health Fund Pty Limited
GUC	Grand United Corporate Health Limited
BUPA	HBA, aka BUPA Australia Health Pty Ltd
HBF	HBF Health Funds Inc
HCF	Hospitals Contribution Fund of Australia Limited
HCI	Health Care Insurance Ltd.
HHBF	Healthguard Health Benefits Fund Limited
HIF	Health Insurance Fund of W.A.
HSL	HAMBS
IOOF	IOOF Health Services Ltd
IOR	I.O.R. Australia Pty. Ltd.
LHMC	Lysaght Peoplecare
LHS	Latrobe Health Services Inc.
MBF	Medical Benefits Fund of Australia Ltd
MDHF	Mildura District Hospital Fund Limited
QCH	Queensland Country Health Limited
MP	Medibank Private Limited
MU	Manchester Unity Australia Ltd
NAVY	Navy Health Ltd
NIB	N.I.B. Health Funds Limited
AXA	AXA Australia Health Insurance Pty Ltd
NSWTF	Teachers Federation Health Ltd
OTH	Other Unknown Fund
PWAL	Phoenix Health Fund Limited
QTUHS	Teachers Union Health
RBHS	Reserve Bank Health Society Ltd
RTEFS	Railway & Transport Employees' FS Health Fund Ltd
SGIO	NRMA Health Pty Ltd
SLMHB	St Luke's Medical & Hospital Benefits Assn Ltd
SAPOL	South Australian Police Employees' Health Fund Inc

HP	Health-Partners Inc	
TBF	Transition Benefits Fund Pty Ltd	
TFS	Transport Friendly Society Ltd	
UAOD	United Ancient Order of Druids	
UOADN	United Ancient Order Druids - NSW	
WDHF	Western District Health Fund Ltd	
YMHS	Federation Health	

RETURNED RESULTS

Transactions submitted using this method will always be left in a Pending state regardless of whether straight through processing (HAMBS System Parameter) is turned on or off.

The Submit Membership Transaction function requires two parameters:

Name	Туре	Description
xmlFile	String	This is the Membership Application xml. It must comply with the MembershipApplication schema found in MemberServices.xsd.
BrokerID	String	This BrokerID must match an AgentID in the HAMBS Agencies table. This agency must have a class of Online Member Services and will need to have a Membership Number Range defined for it in HAMBS.

This method will return an object of class ${\tt SubmitTransactionResult}$ containing:

Name	Туре	Description
TransactionID	Int	Receipt number for the submitted transaction. This is the same as 'TransID' in the HAMBS Database.
MemberNo	Int	Member Number for Applied Transaction only. (SubmitMembershipTransactionUsingSTP) otherwise returns zero (0).

Status	Enum	"Applied" if STP on and transaction is successful
		"Pending" if STP OFF, or if STP on and transaction is not successful "Error" if something went wrong
List <transactionerror></transactionerror>	List<>	List of any returned error messages.

SAMPLE CODE

```
ServiceClient myClient = new ServiceClient();
ServiceClient myVient - new ServiceClient,,
//Set Credentials
myClient.ClientCredentials.UserName.UserName = "userNameProvidedByFund";
myClient.ClientCredentials.UserName.Password = "passwordProvidedByFund";
string agentID = "agentIdProvidedByFund";
//Create xml from lookups and assign transaction xml string transactionXML = @"<MembershipApplication xmlns=""http://www.hambs.com.au/MemberServices.xsd""
                                   xmlns:xsi=""http://www.w3.org/2001/XMLSchema-instance""
xmlns:xsd=""http://www.w3.org/2001/XMLSchema"">
                                    <Persons>
                                       <Person>
                                           Rest of XML goes here
//Open Connection
myClient.Open();
//Call Method
SubmitTransactionResult result =
     myClient.SubmitMembershipTransactionUsingSTP(transactionXML, agentID);
int memberNo = result.MemberNo:
int transactionID = result.TransactionID;
TransactionStatus status = result.Status; //Get transaction status Applied, Pending or Error
List<TransactionError> errors = result.Errors; //Get a list of any published error messages on the transaction
foreach (TransactionError error in errors)
    string id = error.Id;
string text = error.Text;
myClient.Close();
```

New Membership Application

API for the new membership application provides methods to allow custom built membership applications to retrieve information from HAMBS and also submit new membership application transaction into the Membership web services form.

Lookup Methods

Name	Returns	Description

ListTitles	Id,	Lists all Titles from
histrices	Description, Gender	HAMBS>Reference
		Information>Titles
ListRanks	Id Description	Lists all Ranks from HAMBS> Reference Information > Ranks
ListHealthFunds	HICID Description	Lists all HAMBS > Reference Information > Health Funds
ListCommunicationTypes	MediumID	Lists Used and Web
	MediumDescription	Active Communication groups and communication media
	CommunicationMediumID	from
	CommunicationGroup IsUsedstatus	HAMBS>communication Reference > Communication groups
	CommunicationGroup IsOptional Status	, and the second
	CommunicationGroupID	
ListRelationships	ID	Lists all Relationships from HAMBS >
	Description	Reference information >
	Class	Relationships
	Gender	
BankBranchById	Institution Name	Returns the matching
with bsb string parameter	Branch Name	Bank details for bsb from HAMBS
	Branch Address Line1	>Administration > BSBs
	Branch Address Line2	
ListUserDefinedProperties	ID	List of User Defined
with published boolean	Description	Properties. Boolean specifes Published or
parameter	Domain	NOT Published User
	IsMandatory	properties to be
	Any associated look up	returned. Lookup values are supplied if defined
	values	in HAMBS > Reference
		information >User Defined Properties
ListBadges	ID	List all Badges from

	Name	HAMBS > Administration > Badges
ListDirectDebitCreditClasses	Direct Debit/Credit ID Description Class Charge Card Type	Lists all Active, Direct Debit DB/CR Classes from HAMBS > Reference Information>Direct Debit/Credit Classes

Submit Membership Application Transaction (Funds) using STP in HAMBS

 $The \quad method \quad {\tt SubmitMembershipTransactionUsingSTP(string \quad xmlFile, \\$ AgentID) allows membership transactions to be submitted according to the Fund's HAMBS system parameter settings (STP - applied, pending, or declined; and either a prospective or full membership created).

The transaction data is submitted in the form of XML. This XML needs to comply with the schema for this transaction. (Pease refer to the above Transaction Schema)

RETURNED RESULTS

Transactions submitted using this method will be either pending, declined or applied as defined by the STP system parameter in HAMBS.

The Submit Membership Transaction function requires two parameters:

Name	Туре	Description
xmlFile	String	This is the Membership Application xml. It must comply with the MembershipApplication schema found in MemberServices.xsd.
AgentID	String	This AgentID must match an AgentID in the HAMBS Agencies table. This agency must have a class of Online Member Services and will need to have a Membership Number Range defined for it in HAMBS.

This method will return an object of class Submit Transaction Result (as listed previously).

33.4.6

33.4.7 List Home Support Services Persons

The API method ListHomeSupportServicesPersons returns a list of active (not terminated) persons for a given member number.

This method will return an object of class HomeSupportServicesPerson for each person containing:

Name	Туре	Description
PersonID	Integer	Person ID number
FirstName	String	Person's First Name
Surname	String	Person's Surname
BirthDate	DateTime	Person's Date of Birth
Relationship	String	Person's Relationship to the member

${\bf 33.4.8}\>\>\>\> Request Clearance Certificate For Member$

This method generates a clearance certificate request email to the email Id provided. It requires a membership number and transaction number also to be supplied in addition to the Fund email address.

void RequestClearanceCertificateForMember(int memberNo, int transactionId,string healthFundEmail)

33.5 Membership Application – Eligibility Reason & Sub Reason ID

Eligibility Reason and Sub Reason ID can be passed to the membership application module through a post or a session value. This can be done if a fund has a custom eligibility page, but then uses the standard OMS member application steps from the "Cover" step onward.

To pass these values from custom Eligibility page please hide the Eligibility Step in Membership Application >> Configure Content General >> Wizard Bar Labels >> Eligibility and also hide Eligibility Reasons in Membership Application >> Configure Content Eligibility >> Eligibility Generic >> Eligibility Reasons >> Visible.

31.5.1 Fields

Field name	Format	Description
EffectiveDate	DateTime When posting use format dd/mm/yyyy	This is the effective date of the quote and the start date for the cover. This should be today's date or a future date. Dates in the past are not allowed. This field is mandatory.
EligibilityReasonID	String	This is the eligibility reason ID configured in HAMBS. This field is mandatory.
EligibilitySubReasonID	String	This is the eligibility sub reason ID configured in HAMBS

33.5.1 References / Terminology

A brief description of health fund specific terms is listed below for reference.

LHC (LIFETIME HEALTH COVER)

The Government program providing an incentive for Australians to obtain Hospital cover and keep it. In basic terms, anyone who takes out Health Cover prior to the end of Financial Year of their 31st birthday will be exempt from the loading. For each additional (financial) year over their 31st birthday, a person taking out hospital cover for the first time will be subject to a 2% loading per year (up to a maximum of 70%).

OMS asks the member/spouse (who is over 31) Have you had continuous health cover?

This is determining whether the person is transferring to the current fund, and has maintained hospital cover with their previous fund since they were 31 – this means they're exempt if the answer to this question is YES.

LHC loading only applies to adults on the membership over the age of 30, so LHC loading calculations are only applied to the member and the member's partner in OMS. If both the member and their partner are subject to loading, the two percentages are added together, then divided by 2. If only one or the other is subject, the loading percentage is divided by two (as in two people).

LHC loading only applies to Hospital premiums. If the member is requesting both Hospital and Extras cover, only the Hospital component of the premium is subject to the loading.

REBATE (GOVERNMENT 30% REBATE)

The Government offers 30% rebate to all Australians taking health cover. OMS asks the applicant the question "Include Government Rebate?" If the answer is Yes, premiums are discounted by 30% or higher depending on the age of the oldest person on the cover.

PRODUCT SETS (HOSPITAL & ANCILLARY)

Product Sets are the categories Funds apply to each level of cover. There are two product set types available for each cover (or product) – Hospital and Ancillary (which is extras).

Each product can be a combination of a hospital product set and an ancillary (extras) product set, or only one or the other if the cover is just hospital or just extras.

OMS uses product sets to present the member with the different options that can be put together to select a matching product.

PRODUCTS AND RATE SCALES

Products and Rate Scales are closely tied together in HAMBS.

Each level of cover that a member might take, for instance *Top Hospital Cover, Basic Hospital & Ambulance (etc.)* is referred to as a Product. Within each product, multiple Rate Scales are setup to control how much the cover will cost for different membership classes.

For instance, the *Top Hospital Cover* Product may consist of the following Rates:

Rate Scale code	Membership Class	State
AAAA	Single	South Australia
BBBB	Couple	South Australia
CCCC	Family	All States
DDDD	All Classes	New South Wales

Each Rate Scale code can then be assigned different dollar amounts that the member will have to pay.

MEMBERSHIP CLASS (MEMBERSHIP TYPE)

Membership class defines how many people are on a membership and what their relationships to each other will be. Below is the full list of classes.

Class ID	Class Name	Notes
Sgl	Single	Only one person on the membership
Fam	Family	Consists of a spouse/partner and at least one child
Cpl	Couple	Two persons in a spouse/partner relationship – no children
SPFam	Single Parent	One adult and at least one child
2PnoA	2+ persons no adults	Two or more children with no adults
3Adlt	3+ adults	Three or more adults – no children
ChldV	Children – variation	Two or more children and one adult with a cover variation
FamX	Family Extended	Consists of a spouse/partner and at least 1 child of student age who is not a student
FamV	Family – Variation	Two persons in a spouse/partner relationship one with a cover

		variation, and at least 1 child
SglV	Single – Variation	Two persons member and spouse or child with the member having a cover variation
SPFaX	Single Parent Extended	One adult and at least one child or student age who is not a student

FREQUENCIES

Frequencies refer to the regular time period in which contributions are required to keep the health cover active.

Standard frequencies are: Monthly, Fortnightly, Quarterly, $\boldsymbol{6}$ Monthly and Yearly.