Informatica® Email Verification
7.0

User Guide

Informatica Email Verification User Guide
7.0
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Preface

This guide describes the operations of the Email Verification application from Informatica.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

Informatica Network

The Informatica Network is the gateway to many resources, including the Informatica Knowledge Base and Informatica Global Customer Support. To enter the Informatica Network, visit https://network.informatica.com.

As an Informatica Network member, you have the following options:

- Search the Knowledge Base for product resources.

- View product availability information.

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Informatica Velocity

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Informatica Global Customer Support

You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:
https://www.informatica.com/services-and-training/customer-success-services/contact-us.html.

To find online support resources on the Informatica Network, visit https://network.informatica.com and select the eSupport option.

CHAPTER 1

Using Email Verification

This chapter includes the following topics:

Introduction to Email Verification

Email Verification combines state-of-the-art email verification algorithms with hygiene algorithms to allow customers to detect and avoid dangerous or potentially dangerous email addresses or domains.

Some status codes in this document are labeled as potentially dangerous. This label is a result of the hygiene processing component. Caution should be used when e-mailing to addresses labeled as potentially dangerous. For more information, see "What Do the Hygiene Results Mean?" on page 23.

Service URLs

You can use SOAP and REST endpoints to connect to Email Verification. Informatica provides endpoints to locations in the United States and Europe.

Use one of the following SOAP endpoints:

United States

https://ws.strikeiron.com/EmailVerify7?WSDL

Europe

https://eu-ws.informaticadaas.com/EmailVerify7?WSDL

Use one of the following REST endpoints:

United States

```
https://ws.strikeiron.com/StrikeIron/EmailVerify7/EmailVerification
```

Europe

```
https://eu-ws.informaticadaas.com/StrikeIron/EmailVerify7/EmailVerification
```

Required License Information

The LicenseInfo parameter in the web services provides the authentication credentials to allow a user to invoke the web service.

If you are registered with Informatica DaaS, use the UserID and Password associated with your Informatica DaaS account in the UserID and Password fields. Alternatively, you can use a license key that you obtained from Informatica with a blank password field.

The following table describes the output for the license subscription information:

Field Name	Description	Sample Code
LicenseStatusCode	Returns a numeric code indicating the Informatica DaaS license action taken as a result of invoking this operation from the user credentials used for input. Valid license codes are 0, 1, and 2. For example, a valid User ID and Password return the code 0 with a corresponding LicenseStatus value of *Valid license key*.	0
LicenseStatus	Returns the status of the Informatica DaaS User ID and Password corresponding to the LicenseStatusCode.	Valid license key
LicenseActionCode	Returns a numeric code indicating the Informatica DaaS license action taken as a result of invoking this operation.	0
LicenseAction	Returns the license action taken as a result of invoking this operation.	Decremented hit count
RemainingHits	Returns the number of hits, or discrete calls to the Informatica DaaS validation interface, that remain available to the current product license. The RemainingHits value indicates the number of hits that remain available to the license after the current operation is complete.	2

Available Operations

The following operations are available in Email Verification:

- **VerifyEmail**. Accepts an email address for verification and returns a response.
- **GetDomainInfo**. Returns information about the email address domain.
- **GetReasonCodes**. Returns a numerical status code and status description that describes the response to your request.
- **GetRemainingHits**. Returns the number of hits, or calls, that remain in your subscription to the interface.
- **GetRiskProfiles**. Returns all risk profiles associated with a license or customer.
- **GetStatusCodes**. Returns a complete enumeration of the values that may appear in the StatusNbr and StatusDescription parameter for all methods in the interface.

- **GetStatusCodesForMethod**. Returns an enumerated list of the values that appear in the StatusNbr and StatusDescription fields for a given method in the interface.

Note: When you invoke the VerifyEmail and GetDomainInfo operations, the operations consume one hit at a time. When you invoke the GetReasonCodes, GetRemainingHits, GetRiskProfiles, GetStatusCodes, and GetStatusCodesForMethod operations, the operations consume zero hits at a time.

VerifyEmail

Use the fields in the tables below to configure the input to the operation and to read the output from the operation. The outputs from VerifyEmail include the delivery recommendation for the input email address.

The outputs also include fields that you can read to understand the reasons for the recommendation. To more fully understand the recommendation, consult the StatusNbr value in the ServiceStatus output in conjunction with the Reason: Code, Reason: Description, and Hygiene: HygieneResult values in the ServiceResult output. The recommendation depends on the risk tolerance profile that you specify for the verification request.

Input

The following table describes the input fields:

Field	Description	Sample Input
Email	The email address that you want to verify. Required value.	johndoe@informatica.com
TimeoutSeconds	The amount of time, in seconds, that the service searches for the email address. Enter a value between 1 and 300 seconds. The default value is 29 seconds.	10
SourceId	An ID value to return with the result as a source identifier. Optional value.	Source01
MaxSuggestions	The maximum number of suggestions to be returned as part of the response. The valid value range is 0 through 10. The default value is 3.	5
RiskProfile	The name of the risk tolerance profile that your send recommendations are based on. Informatica provides out-of-the-box profiles with the following names: - Low Risk - Medium Risk - High Risk The default profile is Medium Risk. You can also submit the name of a custom risk tolerance profile. Users can create and customize risk tolerance profiles on the Data as a Service customer portal.	Low Risk

ServiceStatus Output

The following table describes the ServiceStatus output fields:

Field	Description	Sample Output
StatusNbr	Returns a number that represents the status of the request. See also GetStatusCodes.	200
StatusDescription	Returns the description of the status number. See also GetStatusCodes.	Email Valid

ServiceResult Output

The following table describes the ServiceResult output fields:

Field	Description	Sample Output
SourceId	Input value in the SourceId parameter.	Source01
Timestamp	The current UTC timestamp.	2019-04-05T07:22:12.9802161Z
Email: Complete	The email address that you entered.	johndoe@informatica.com
Email: LocalPart	The local part of the email address that you entered.	johndoe
Email: DomainPart	The domain name in the email address that you entered.	informatica.com
Email: AliasMasterAddress	When the email address is an alias address, the service returns the master email address in this field.	johndoe@gmail.com
Reason: Code	Further describes the response of the request. Reason code is associated with a Reason Description and is a subset of a Status Number and Description.	201
Reason: Description	Further describes the response of the request. Reason Description is a subset of a Status Number and Description.	Mailbox Confirmed
Hygiene: HygieneResult	Result of the Hygiene routine.	Safe US
Hygiene: NetProtected	Indicates if the domain is protected by a third party.	true
Hygiene: NetProtectedBy	The third party protecting the domain.	AppRiver
SendRecommendation: RiskProfile	The name of the risk tolerance profile used to create the current send recommendation.	Low Risk

Field	Description	Sample Output
SendRecommendation: Recommendation	The recommendation on whether to send the email, based on your risk tolerance profile. Use to make a decision on whether or not to send the email. Possible values: - Bad Profile - Do not Send - Error - Retry - Send - Unknown **Note:** You receive the send recommendations based on the combination of the reason logic and the hygiene result.	Send
SendRecommendation: RecommendedRetries	When the send recommendation is Retry, this number indicates how often you should to try to verify the email address before considering it "Do not Send".	2
SendRecommendation: RecommendedRetryDelaySeconds	When the send recommendation is Retry, this number indicates how many seconds you should wait before submitting the email for verification again.	60
DestinationCountry: Code	The ISO 3166-1 numerical country code of the country that hosts the destination mail server, if it is possible to identify it.	840
DestinationCountry: Alpha2Code	The ISO 3166-1 2 digit country code of the country that hosts the destination mail server, if it is possible to identify it.	US
DestinationCountry: Alpha3Code	The ISO 3166-1 3 digit country code of the country that hosts the destination mail server, if it is possible to identify it.	USA
DestinationCountry: Name	The name of the country according to the ISO 3166-1 standard.	United States of America
Cached	Indicates whether the verification result was pulled from the cache. This happens if the email was verified recently.	true
Disposable	Indicates whether the address has a finite life-span.	true
PotentiallyVulgar	Indicates if vulgar words have been identified as part of the email address.	true
VulgarLanguage	When the email address is found to contain potentially vulgar words, this field returns the language as an ISO 639-1 code.	EN

Field	Description	Sample Output
RoleBased	Indicates whether the address identifies a role and not an individual, for example hr@informatica.com.	false
RoleBasedLanguage	When the email address is found to contain potentially role words, this field returns the language as an ISO 639-1 code.	EN
EmailSegment	Indicates the type of email address. The following list shows the types of email addresses: - Personal - Business - Unknown	Business
PossibleCorrections	A list suggestions for email addresses that may be incorrect or otherwise seem to differ from what the user might have intended. Returns suggestions up to the number that the MaxSuggestions input field specifies.	johndoe@gmail.com
DomainKnowledge	Key/Value pairs of domain information. Reserved for future use.	
AddressKnowledge	Key/Value pairs of address information. Reserved for future use.	

GetDomainInfo

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

The following table describes the input fields:

Field	Description	Sample Input
Domain	The domain about which you want to retrieve information. Required value.	informatica.com
Timeout	The amount of time, in seconds, that the service searches for the domain information. Enter a value between 1 and 90 seconds. The default value is 60 seconds.	5
SourceId	An ID value to return with the result as a source identifier. Optional value.	Source01

ServiceStatus Output

The following table describes the ServiceStatus output fields:

Field	Description	Sample Output
StatusNbr	Returns a number that represents the status of the request. See also GetStatusCodes.	200
StatusDescription	Returns the description of the status number. See also GetStatusCodes.	Successful

ServiceResult Output

The service returns information retrieved from *whois.com* and *dnsinfo.com*. The websites can provide information such as the creation date of the domain and the domain owner.

Informatica has no control over the information that is returned in the respective `WhoisInfo` or `DnsInfo` sections of the Service output.

The following table describes the ServiceResult output fields:

Field	Description	Sample Output
WhoisInfo: CreationDate	Date the domain was registered.	10/17/1995 00:00:00
WhoisInfo: UpdateDate	Date the domain registration was updated.	2018-11-29T15:09:03Z
WhoisInfo: ExpiryDate	Date the domain registration will expire.	10/16/2019 04:00:00

WhoisInfo: Registrant	Who registered the domain.
	Includes the following information:
	1. Name
	2. Organization
	3. Phone
	4. Email
	5. Address
		The Registrant field includes the following sample outputs:
		1. Name: Domain Admin
		2. Organization: Informatica LLC
		3. Phone: +1.6503855000
		4. Email: infadomainnames@informatica.com
		5. Address:
		`    Street: 2100 Seaport Blvd`
		`    City: Redwood City`
		`    State: California`
		`    Country: US`

WhoisInfo: Admin	Who is the administrator of the domain.
	Includes the following information:
	1. Name
	2. Organization
	3. Phone
	4. Email
	5. Address
		The Admin field includes the following sample outputs:
		1. Name: Domain Admin
		2. Organization: Informatica LLC
		3. Phone: +1.6503855000
		4. Email: infadomainnames@informatica.com
		5. Address:
		`    Street: 2100 Seaport Blvd`
		`    City: Redwood City`
		`    State: California`
		`    Country: US`

Field	Description	Sample Output

WhoisInfo: Tech	Who is the technical contact for the domain.
	
	Includes the following information:
	
	1. Name
	2. Organization
	3. Phone
	4. Email
	5. Address
		The Tech field includes the following sample outputs:
		
		1. Name: NetNames Hostmaster
		2. Organization: Netnames Ltd
		3. Phone: +44.2070159370
		4. Email: hostmaster@netnames.net
		5. Address:
		  `Street: 25 Canada Square, 37th`
		  `Floor, Canary Wharf`
		  `City: London`
		  `State: London`
		  `Country: GB`

WhoisInfo: Registrar	Which domain registrar was used to register the domain. Includes the following information: 1. Name 2. Url 3. AbusePhone: Phone number to call with abuse complaints. 4. AbuseEmail: Email to contact with abuse complaints.	The Registrar field includes the following sample outputs: 1. Name: CSC CORPORATE DOMAINS, INC. 2. Url: www.cscprotectsbrands.com 3. AbusePhone: +1.8887802723 4. AbuseEmail: domainabuse@cscglobal.com
WhoisInfo: IsCached	True if we retrieved this record from our short-term cache of WHOIS data.	true
DnsInfo: ARecordExists	True if an A record exists for the domain. This maps the domain to an IP address. If this record does not exist that is a red flag as it is not tied to anything.	true
DnsInfo: SpfRecordExists	True if an SPF (Sender Policy Framework) record exists for the domain. This is used to indicate to mail servers which hosts are authorized to send mail for a domain. If this record does not exist that is a red flag because most reputable email servers have this defined.	true
DnsInfo: WwwRecordExists	True if a WWW record exists for a domain. Most reputable sites have this going to their home page.	true

Field	Description	Sample Output
DnsInfo: MxRecords	Includes details on 0 or more MX (Mail Exchange) records. These define the actual mail servers that accept email for the domain. An MxRecord in the MxRecords field includes the following information: 1. Mx: Domain of the email server. 2. IpAddresses: 0 or more IP addresses associated with the mail server. An IP address entry includes the following information: An IP address entry includes the following information: 1. Address: The IPv4 address. 2. CountryCode: The ISO-2 country code where the IP address is located. 3. Owner: The entity that owns the IP address, usually a large ISP (Internet Service Provider).	Mx: informatica-com.mail.protection.outlook.com
IsCatchAll	The domain will accept all incoming email regardless of whether the mailbox exists.	false
IsDisposable	The domain is known to provide disposable email addresses.	false
IsRestrictedCountry	The country in which the domain is hosted is listed as a sanctioned country by the United States government.	false

GetReasonCodes

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

This operation uses the LicenseInfo data and does not require any input.

The operation returns a list of the values that display for the VerifyEmail() method in the ReasonCode and ReasonDescription fields.

ServiceStatus Output

The following table describes the ServiceStatus output fields:

Field	Description	Sample Output
StatusNbr	Returns a number referring to the status of the request. See GetStatusCodes.	200
StatusDescription	Returns the description of the status number. See GetStatusCodes.	Found

ServiceResult Output

The following table describes the possible Reason Codes and Reason Descriptions in the ServiceResult output fields:

Reason Code	Reason Description
201	Mailbox Confirmed
202	User Account Confirmed
203	Mailbox Confirmed But Full
211	Server Will Accept
212	Unable To Verify At This Time
213	Server In Restricted Country, Will Not Contact
222	Server Not Responding
223	Server Deferred
224	Server Throttled
225	Server Actively Rejected
301	Missing @ Symbol
302	Bad Domain Syntax
303	Bad Local Part Syntax
304	Domain Not Found
305	Not A Valid Mail Domain
307	Mailbox Rejected
311	Trap Domain
401	Email Is Required

Reason Code	Reason Description
402	TimeoutSeconds must be greater than 0 and less than or equal to 300
403	MaxSuggestions must be greater than or equal to 0 and less than or equal to 10

GetRemainingHits

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

This operation uses the LicenseInfo data and does not require any input.

The operation returns the number of hits, or calls, that remain in your subscription.

SubscriptionInfo Output

The following table describes the SubscriptionInfo output fields:

Field Name	Description	Sample Code
LicenseStatusCode	Returns a numeric code indicating the Data as a Service license action taken as a result of invoking this operation from the User ID and Password used for input. Valid license codes are 0, 1, and 2. For example, a valid User ID and Password returns the code 0 with a corresponding LicenseStatus value of *Valid license key*.	0
LicenseStatus	Returns the status of the Data as a Service User ID and Password that correspond to the LicenseStatusCode.	Valid license key
LicenseActionCode	Returns a numeric code indicating the Data as a Service license action taken as a result of invoking this operation. GetRemainingHits returns the code 5 with a corresponding LicenseAction value of Get remaining hits.	5

Field Name	Description	Sample Code
LicenseAction	Returns the license action taken as a result of invoking this operation from the User ID and Password corresponding to the LicenseActionCode.	Get remaining hits
RemainingHits	Returns the number of hits available to the Informatica DaaS user against whose user credentials an operation will run. The RemainingHits value is calculated before the operation runs.	2

GetRiskProfiles

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

This operation uses the LicenseInfo data and does not require any input. You can provide a user name and password or a license key.

Output

Returns an array of all risk profile names that are available to the credentials that you provide. The operation can return the standard profiles *Low Risk, Medium Risk*, and *High Risk* and any applicable custom profiles.

If you enter a license key, the operation shows the profiles for that license key and also the default profile.

If you enter a user name and password, the system identifies the license for the user and returns the applicable profiles.

The following sample output shows a risk profile name:

```
<RiskProfile>
        <Name>High Risk</Name>
        <IsDefault>false</IsDefault>
</RiskProfile>
```

GetStatusCodes

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

This operation uses the LicenseInfo data and does not require any input.

The operation displays a list of the Status Codes for the webservice that display in the StatusNbr and StatusDescription fields.

ServiceStatus Output

The following table describes the ServiceStatus output fields:

Field	Description	Sample Output
StatusNbr	Returns a number referring to the status of the request.	200
StatusDescription	Returns the description of the status number.	Found

MethodStatusRecord Output

The following table describes the StatusNbr and StatusDescription values for the VerifyEmail method:

StatusNbr	StatusDescription
200	Email Valid
210	Domain Confirmed
220	Analytics In Progress
250	Email Valid, Potentially Dangerous
260	Domain Confirmed, Potentially Dangerous
270	Analytics In Progress, Potentially Dangerous
300	Email Not Valid
310	Not Verified, Dangerous Domain
400	Invalid Input
500	Internal Error

The following table describes the StatusNbr and StatusDescription values for the GetDomainInfo method:

StatusNbr	StatusDescription
200	Successful
300	Not a Valid Mail Domain
400	Invalid Input
500	Internal Error

The following table describes the StatusNbr and StatusDescription values for the GetReasonCodes method:

StatusNbr	StatusDescription
200	Found

The following table describes the StatusNbr and StatusDescription values for the GetRiskProfiles method:

StatusNbr	StatusDescription
200	Successful
500	Internal Error

The following table describes the StatusNbr and StatusDescription values for the GetStatusCodes method:

StatusNbr	StatusDescription
200	Found
300	Not Found
500	Internal Error

The following table describes the StatusNbr and StatusDescription values for the GetStatusCodesForMethod method:

StatusNbr	StatusDescription
200	Found
300	Not Found
400	Invalid Method Name
500	Internal Error

GetStatusCodesForMethod

Use the fields in the tables below to configure the input to the operation and to read the output from the operation.

Input

The following table describes the input fields:

Field	Description	Sample Input
MethodName	Enter a method name to obtain a list of the status codes for that method that display in the StatusNbr and StatusDescription fields.	VerifyEmail

ServiceStatus Output

The following table describes the ServiceStatus output fields for the method name that you submit:

Field	Description	Sample Output
StatusNbr	Returns a number referring to the status of the request. See GetStatusCodes.	200
StatusDescription	Returns the description of the status number. See GetStatusCodes.	Found

ServiceResult Output

The following table describes the possible StatusNbr and StatusDescription values in the ServiceResult output fields when you submit VerifyEmail as the method name:

StatusNbr	StatusDescription
200	Email Valid
210	Domain Confirmed
220	Analytics In Progress
250	Email Valid, Potentially Dangerous
260	Domain Confirmed, Potentially Dangerous
270	Analytics In Progress, Potentially Dangerous
300	Email Not Valid
310	Not Verified, Dangerous Domain
400	Invalid Input
500	Internal Error

CHAPTER 2

Frequently Asked Questions

This chapter includes the following topics:

What is Analytics In Progress?

Analytics In Progress (AIP) is returned when a definitive Email Verification result cannot be reached and we believe further processing could determine a definitive result. When you receive this return code the Email Verification infrastructure is continuing to attempt to resolve your submission. By calling the interface a second time (after a time delay) a definitive result may be available.

One common reason for receiving this return code is that the timeout value you have specified is too short for the specified domain. For example, if the mail server for a domain is taking 10 seconds to respond to a request and you have set the timeout value to 5 seconds, once the 5 seconds has passed an AIP result will be returned. The Email Verification system is still attempting to verify the address and if you make the same request later there is a higher chance you will get a definitive answer.

Another common reason for receiving this return code is that the target email domain is a "Grey List" server. Grey listing is an attempt to discourage spam. Generally this means that a given email server will refuse connections from other email servers the first time they try to connect. After some time frame (this is server specific and may span a minute or two to twenty minutes or more) if the same email server retries the connection it will be allowed. When you receive AIP, our process will continue to attempt to resolve the address, thus satisfying a grey list email server.

Does Email Verification Return Key Value Pairs?

Currently, Email Verification does not return key value pairs in the DomainKnowledge or AddressKnowledge sections of the response.

What Do the Hygiene Results Mean?

The hygiene results have the following meanings:

Safe US

The email address is based in the US and is safe.

Safe International

The address is based internationally and is safe.

Invalid

The address has been determined to be invalid by the hygiene processing. These are often redirected domains or domains that do not have email servers set up properly.

Spam Trap

The address or domain has been determined to be a spam trap or honey pot by the hygiene processing. Emailing these addresses may result in damage to your email reputation.

Mole

The address or domain shows historical evidence of being associated with submissions to spam tracking services.

Former Trap

The address or domain has been previously identified as a spam trap, but at this time would be considered safe if the process did not consider historical evidence.

Seed

The address is a third-party oversight addresses specifically used for monitoring resources, for example for deliverability monitoring. Also included in this category are any litigious addresses, or those who seed their email address for the sole purpose of litigation. Habitual complainers, or those who have an extremely high rate of spam complaints, are also included in this category.

Pattern Match

This status uses typical key words, phrases, or patterns that are used for trap purposes. Also included in this category are role based addresses that typically are not delivered to a specific person such as info, support, or sales.

Parked

Parked domains can be used as honey-pots for spam blacklist agencies, making them very dangerous to email. A domain can be considered parked for several reasons, including the domain being for sale, or the domain being registered but never taken live.

Unknown

The address or domain did not result in a specific hygiene result. The most common cause of this return value is a timeout during hygiene processing.

What is Net Protect?

A "Net Protected" domain uses a third-party service or appliance to filter and detect spam email. The rules for determining what is considered as spam by these networks can vary widely.

Can I Call the GetServiceInfo Method?

GetServiceInfo is deprecated. The operation name remains in the WSDL at the current time. However, calling GetServiceInfo generates a 300 error code.

What is an Alias Email Address?

An alias email address is an alternative email address associated to the primary email address.

For example, consider the following alias email address `jondoe+testing@gmail.com` where "+testing" is an address tag valid in case of Gmail addresses for the primary email address `jondoe@gmail.com`.

Note: Each domain might include different address tags.

How Does VerifyEmail Handle an Email Address in a Catch-All Domain?

When you use the VerifyEmail operation to verify an email address from the catch-all domain, the operation returns a status code of 210 and a reason code of 211.

Can I Create or Update a Risk Tolerance Profile?

You can create risk tolerance profiles for email verification in the Data as a Service customer portal. You can update a risk tolerance profile that you create, but you cannot update a risk tolerance profile that Informatica created. To update the properties of an Informatica risk tolerance profile, create a copy of the profile and customize the copy.

Log in to the customer portal at the following URL:

https://portal.strikeiron.com

To create a risk profile, log in to the portal and complete the following steps:

1. Select the **Preferences** option on the toolbar.
2. On the **Account Preferences** page, select the **Service Configuration** tab.
3. Under the product name, click **Manage Risk Tolerance Profiles**.
4. Click **Create new profile**. Or, click the **Copy** link in the **Actions** column associated with a current profile. In each case, you use a current profile as the basis for the profile that you will create.

Customizing a Risk Tolerance Profile

To customize a profile, click the **Edit** link in the **Actions** column of the profile. You cannot edit the risk profiles that Informatica provides.

You can perform the following tasks on a risk tolerance profile:

- Edit the name and description of the profile.
- Set the number of retries and the retry delay for each Retry recommendation.
- Update the send recommendation for each combination of status values.

Tip: Use the filters in the profile to find the values for which you will edit the send recommendation. You can combine filters to narrow your search.

For example, the Informatica low-risk profile specifies a Retry recommendation for any email address with a Hygiene value of Unknown. You might decide to update the recommendation in such cases to Do Not Send.

To update the recommendation, complete the following steps:

- Create a custom profile from the Informatica Low Risk profile.
- Use the Hygiene filter to display all recommendations that include the Unknown hygiene value.
- Change each recommendation to Do Not Send.

Rules and Guidelines for Risk Tolerance Profiles

Consider the following rules and guidelines:

- You can change the default profile for Email Verification on the customer portal or when you define the inputs on the VerifyEmail method.
- You can set a default profile at the user level or at the license key level. When you set a default profile at the user level, you set the profile as the default for all license keys associated with the user.
- You can activate or deactivate the risk tolerance profiles that you create.

  Note: Before you deactivate a profile, ensure that other users do not expect to make verification calls with the profile that you deactivated.

- In the **Actions** column on the **Your risk tolerance profiles** page, you can select options to view, edit, copy, or delete a risk tolerance profile that you or another user created. You cannot edit or delete the risk profiles that Informatica provides.

APPENDIX A

Testing the Input and Result XML

This appendix includes the following topic:

Sample Input and Result XML for VerifyEmail

You can submit a VerifyEmail request with a test email address to return the full range of possible outputs from Email Verification.

To return the full range of outputs, submitfollowing email address:

```
test-all-fields-01@strikeiron.com
```

For example, submit the following request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ws="http://ws.strikeiron.com" xmlns:str="http://www.strikeiron.com/">
    <soapenv:Header>
        <ws:LicenseInfo>
            <ws:RegisteredUser>
                <ws:UserID>******</ws:UserID>
                <ws:Password>*******</ws:Password>
            </ws:RegisteredUser>
        </ws:LicenseInfo>
    </soapenv:Header>
    <soapenv:Body>
        <str:VerifyEmail>
            <str:Email>test-all-fields-01@strikeiron.com</str:Email>
            <str:TimeoutSeconds>29</str:TimeoutSeconds>
            <str:SourceId>MySourceId</str:SourceId>
            <str:MaxSuggestions>5</str:MaxSuggestions>
            <str:RiskProfile>Medium Risk</str:RiskProfile>
        </str:VerifyEmail>
    </soapenv:Body>
</soapenv:Envelope>
```

Email Verification returns the following response to the request:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/
XMLSchema">
    <Header xmlns="http://schemas.xmlsoap.org/soap/envelope/">
        <SubscriptionInfo xmlns="http://ws.strikeiron.com">
            <LicenseStatusCode>0</LicenseStatusCode>
            <LicenseStatus>Valid license key</LicenseStatus>
            <LicenseActionCode>0</LicenseActionCode>
            <LicenseAction>Decremented hit count</LicenseAction>
            <RemainingHits>988</RemainingHits>
            <Amount>0</Amount>
        </SubscriptionInfo>
```

```
            </Header>
            <soap:Body>
                <VerifyEmailResponse xmlns="http://www.strikeiron.com/">
                    <VerifyEmailResult>
                        <ServiceStatus>
                            <StatusNbr>200</StatusNbr>
                            <StatusDescription>Email Valid</StatusDescription>
                        </ServiceStatus>
                        <ServiceResult>
                            <SourceId>MySourceId</SourceId>
                            <Timestamp>2019-04-16T20:49:20.0765007Z</Timestamp>
                            <Email>
                                <Complete>test-all-fields-01@strikeiron.com</Complete>
                                <LocalPart>test-all-fields-01</LocalPart>
                                <DomainPart>strikeiron.com</DomainPart>
                                <AliasMasterAddress>test-all-fields@strikeiron.com</AliasMasterAddress>
                            </Email>
                            <Reason>
                                <Code>201</Code>
                                <Description>Mailbox Confirmed</Description>
                            </Reason>
                            <Hygiene>
                                <HygieneResult>Safe International</HygieneResult>
                                <NetProtected>true</NetProtected>
                                <NetProtectedBy>*Example* NetworkProtect (for testing
purposes)</NetProtectedBy>
                            </Hygiene>
                            <SendRecommendation>
                                <RiskProfile>Medium Risk</RiskProfile>
                                <Recommendation>Send</Recommendation>
                                <RecommendedRetries>0</RecommendedRetries>
                                <RecommendedRetryDelaySeconds>0</RecommendedRetryDelaySeconds>
                            </SendRecommendation>
                            <DestinationCountry>
                                <Code>997</Code>
                                <Alpha2Code>XX</Alpha2Code>
                                <Alpha3Code>XXX</Alpha3Code>
                                <Name>*Example* CountryName</Name>
                            </DestinationCountry>
                            <Cached>true</Cached>
                            <Disposable>false</Disposable>
                            <PotentiallyVulgar>false</PotentiallyVulgar>
                            <VulgarLanguage>XX</VulgarLanguage>
                            <RoleBased>false</RoleBased>
                            <RoleBasedLanguage>XX</RoleBasedLanguage>
                            <EmailSegment>Unknown</EmailSegment>
                            <PossibleCorrections>
                                <string>test-correct-00@strikeiron.com</string>
                                <string>test-correct-01@strikeiron.com</string>
                                <string>test-correct-02@strikeiron.com</string>
                                <string>test-correct-03@strikeiron.com</string>
                                <string>test-correct-04@strikeiron.com</string>
                                <string>test-correct-05@strikeiron.com</string>
                                <string>test-correct-06@strikeiron.com</string>
                                <string>test-correct-07@strikeiron.com</string>
                                <string>test-correct-08@strikeiron.com</string>
                                <string>test-correct-09@strikeiron.com</string>
                            </PossibleCorrections>
                            <DomainKnowledge>
                                <StringKeyValuePair>
                                    <Key>key01</Key>
                                    <Value>*Example* DomainKnowledge Value01</Value>
                                </StringKeyValuePair>
                                <StringKeyValuePair>
                                    <Key>key02</Key>
                                    <Value>*Example* DomainKnowledge Value02</Value>
                                </StringKeyValuePair>
                                <StringKeyValuePair>
                                    <Key>key03</Key>
                                    <Value>*Example* DomainKnowledge Value03</Value>
                                </StringKeyValuePair>
```

```
                              </DomainKnowledge>
                              <AddressKnowledge>
                                  <StringKeyValuePair>
                                      <Key>key01</Key>
                                      <Value>*Example* AddressKnowledge Value01</Value>
                                  </StringKeyValuePair>
                                  <StringKeyValuePair>
                                      <Key>key02</Key>
                                      <Value>*Example* AddressKnowledge Value02</Value>
                                  </StringKeyValuePair>
                                  <StringKeyValuePair>
                                      <Key>key03</Key>
                                      <Value>*Example* AddressKnowledge Value03</Value>
                                  </StringKeyValuePair>
                              </AddressKnowledge>
                          </ServiceResult>
                      </VerifyEmailResult>
                  </VerifyEmailResponse>
              </soap:Body>
          </soap:Envelope>
```

Return Codes

This appendix includes the following topic:

-

Email Verification Status Number and Reason Code Combinations

The email verification process returns a set of outputs that describe the reasons for an email delivery recommendation. The outputs include a StatusNbr value and Reason Code value.

The risk tolerance profile that you select for the verification process determines the recommendation for each email address. You can view the risk tolerance profile properties on the Informatica Data as a Service portal.

The following table lists the reason codes that a profile can contain along with the status number values with which each reason code can occur:

StatusNbr	StatusDescription	Reason Code and Reason Description
200	Email Valid	201 - Mailbox Confirmed 202 - User Account Confirmed 203 - Mailbox Confirmed But Full
210	Domain Confirmed	211 - Server Will Accept 212 - Unable To Verify At This Time
220	Analytics In Progress	222 - Server Not Responding 223 - Server Deferred 224 - Server Throttled 225 - Server Actively Rejected
250	Email Valid, Potentially Dangerous	201 - Mailbox Confirmed 202 - User Account Confirmed 203 - Mailbox Confirmed But Full

StatusNbr	StatusDescription	Reason Code and Reason Description
260	Domain Confirmed, Potentially Dangerous	211 - Server Will Accept 212 - Unable To Verify At This Time 213 - Server In Restricted Country, Will Not Contact
270	Analytics In Progress, Potentially Dangerous	222 - Server Not Responding 223 - Server Deferred 224 - Server Throttled 225 - Server Actively Rejected
300	Email Not Valid	301 - Missing @ Symbol 302 - Bad Domain Syntax 303 - Bad Local Part Syntax 304 - Domain Not Found 305 - Not a Valid Mail Domain 307 - Mailbox Rejected
310	Not Verified, Dangerous Domain	311 - Trap Domain
400	Invalid Input	401 - Email Is Required 402 - TimeoutSeconds must be greater than 0 and less than or equal to 300 403 - MaxSuggestions must be greater than or equal to 0 and less than or equal to 10
500	Internal Error	N/A