#### **IDENTITY MANAGEMENT SERVICE ENHANCEMENTS**

As in prior releases, CPQ Cloud customers can leverage identity management solutions such as Oracle Identity Cloud Service (IDCS) to simplify the administration of users and passwords. CPQ Cloud's integration features simplify the implementation of identity services for Enterprise customers by allowing customers to delegate user management activities such as user creation, activation, revocation, and password management for host company users to IDCS or other Identity Service providers.

The following enhancements are available in Release 18D:

- Access Swagger metadata schema for User REST APIs from Interface Catalog
- User Management REST APIs
- Support for currency and language codes in User REST APIs

#### Access Swagger Metadata Schema for User REST APIs from Interface Catalog

In addition to performing CRUD operations through User REST APIs (introduced in 2017 R2), customers can now access the Swagger metadata schema for User REST APIs through the Interface Catalog. The Swagger metadata schema supports endpoints for user creation, user modification, and user password reset.

To access Swagger metadata schema for User REST APIs, perform the following steps:

- 1. Open the Admin Home page.
- Select Interface Catalogs under Integration Platform.
   The Interface Catalogs page opens.
- 3. Click the Users link.

The Swagger definition for the User REST APIs displays, including REST endpoints and request and response payload definitions.

# **User Management REST APIs**

Administrators can create and modify users via User REST APIs.

# Create User REST API

	Create User REST API		
Description	This operation creates a new user.		
URI Endpoint	/rest/v5/companies/{d	companyName}/users	
Endpoint Parameters	{companyName}	The company name associated with the user.  For Host Company users, use _host.  For Partner Organization users, use the Partner Organization company name.	
HTTP Method	POST		
Request Body Parameters	email	The email address of the user.  This is a required parameter.	
	first name	The first name of the user.  This is a required parameter.	
	login	The login ID of the user.  This is a required parameter.	
	type	The type of user.  This is a required parameter.	
	id	The unique identifier of the user.	
	companyId	The company ID to associate with the user.	
	language	The language ID to associate with the user.	
	languageCode	The language code to associate with the user.	
	currency	The currency ID to associate with the user.	
	currencyCode	The currency code to associate with the user.	
	lastName	The last name of the user.	
	jobTitle	The job title of the user.	
	phone	The phone number of the user.	
	fax	The fax number of the user.	
	billFirstName	The billing first name.	

billLastName	The billing last name.
billCompany	The billing company.
billCompany2	Additional billing company information.
billAddress1	The billing address.
billAddress2	Additional billing address information.
billCity	The city associated with the billing address.
billStateProvince	The state or province to associated with the billing address.
billZip	The zip code to associate with the billing address.
billCountry	The country to associate with the billing address.
billPhone	The phone number to associate with the billing address.
billFax	The fax number to associate with the billing address.
billEmail	The email address to associate with the billing address.
shipFirstName	The shipping first name.
shipLastName	The shipping last name.
shipCompany	The shipping company.
shipCompany2	Additional shipping company information.
shipAddress1	The shipping address.
shipAddress2	Additional shipping address information.
shipCity	The city associated with the shipping address.
shipStateProvince	The state or province associated with the shipping address.
shipZip	The zip code to associate with the shipping address.
shipCountry	The country to associate with the shipping address.
shipPhone	The phone number to associate with the shipping address.
shipFax	The fax number to associate with the shipping address.
shipEmail	The email address to associate with the shipping address.
timeZone	The time zone of the user.

	externalSsoId	The external Single Sign On ID to associate with the user.
	approvalDelegate	The approval delegate associated with the user.
	separateShipAddr	Is there a separate shipping address for the user?  Yes = true  No = false
	isNotifyEmail	Is the notification preference email?  Yes = true  No = false
	isNotifyFax	Is the notification preference fax?  Yes = true  No = false
	isSuperUserPermEna bled	Is superuser permission enabled?  Yes = true  No = false
	isWebServicesOnly	Is Web Services Only enabled? Yes = true No = false
	numberFormatId	The number format ID.
	units	The user's unit-type preference.
	datePreId	The user's date preference.
	status	The status of the user.
	enabledForSso	The Single Sign-On information associated with the user.
	isAccessAdminPremE nabled	Is Access Admin permissions enabled? Yes = true No = false
	isProxyPermEnabled	Are proxy permissions enabled?  Yes = true  No = false
Response Body Parameters	Creation of the JSON data for	r the new user.

### **URI ENDPOINT SAMPLE**

https://sitename.bigmachines.com/rest/v5/companies/{companyname}/users

# Sample Request Body

```
"login": "AAP39",
  "firstName": "AA39",
  "lastName": "PP39",
  "email": "service2@bigmachines.com",
  "status": 1,
  "type": "FULL_ACCESS",
  "enabledForSso": "NOT_ENABLED",
  "languageCode": "es_ES",
  "currencyCode": "GBP"
}
```

### Get User Details REST API

Get User Details REST API		
Description	This operation returns user details for a specific user.	
URI Endpoint	/rest/v5/companies/{companyname}/users/(userName)	
Endpoint Parameters	The company name associated with the user.  For Host Company users, use _host.  For Partner Organization users, use the Partner Organization company name.	
	{userName}	The login ID of the user.
HTTP Method	GET	
Request Body Parameters	None	
Response Body Parameters	JSON data for the user. Returns all attributes from the user object in JSON format.	

# Replace User Details REST API

Replace User Details REST API		
Description	This operation replaces the details of an existing user or creates a new user. If the Request URI references an existing user, the existing user details are replaced with an updated version of the user details. If the Request URI references a user that does not already exist, a new user is created.	
URI Endpoint	//rest/v5/companies/{companyName}/users/{userName}	
Endpoint Parameters	The company name associated with the user.  For Host Company users, use _host.  For Partner Organization users, use the Partner Organization company name.	
	{userName}	The login ID of the user.
HTTP Method	PUT	
Request Body Parameters	id	The unique identifier of the user.
rarameters	companyId	The company ID to associate with the user.
	type	The type of user.
	language	The language ID to associate with the user.

languageCode	The language code to associate with the user.
currency	The currency ID to associate with the user.
currencyCode	The currency code to associate with the user.
login	The login ID of the user.
firstName	The first name of the user.
lastName	The last name of the user.
jobTitle	The job title of the user.
email	The email address of the user.
phone	The phone number of the user.
fax	The fax number of the user.
billFirstName	The billing first name.
billLastName	The billing last name.
billCompany	The billing company.
billCompany2	Additional billing company information.
billAddress1	The billing address.
billAddress2	Additional billing address information.
billCity	The city associated with the billing address.
billStateProvince	The state or province to associated with the billing address.
billZip	The zip code to associate with the billing address.
billCountry	The country to associate with the billing address.
billPhone	The phone number to associate with the billing address.
billFax	The fax number to associate with the billing address.
billEmail	The email address to associate with the billing address.
shipFirstName	The shipping first name.
shipLastName	The shipping last name.
shipCompany	The shipping company.

shipCompany2	Additional shipping company information.	
shipAddress1	The shipping address.	
shipAddress2	Additional shipping address information.	
shipCity	The city associated with the shipping address.	
shipStateProvince	The state or province associated with the shipping address.	
shipZip	The zip code to associate with the shipping address.	
shipCountry	The country to associate with the shipping address.	
shipPhone	The phone number to associate with the shipping address.	
shipFax	The fax number to associate with the shipping address.	
shipEmail	The email address to associate with the shipping address.	
timeZone	The time zone of the user.	
externalSsoId	The external Single Sign On ID to associate with the user.	
approvalDelegate	The approval delegate associated with the user.	
separateShipAddr	Is there a separate shipping address for the user?  Yes = true  No = false	
isNotifyEmail	Is the notification preference email?  Yes = true  No = false	
isNotifyFax	Is the notification preference fax?  Yes = true  No = false	
isSuperUserPermEna bled	Is superuser permission enabled?  Yes = true  No = false	
isWebServicesOnly	Is Web Services Only enabled?  Yes = true  No = false	
numberFormatId	The number format ID.	
units	The user's unit-type preference.	
datePreId	The user's date preference.	

	status	The status of the user.
	enabledForSso	The Single Sign-On information associated with the user.
	isAccessAdminPremE nabled	Is Access Admin permissions enabled?  Yes = true  No = false
	isProxyPermEnabled	Are proxy permissions enabled?  Yes = true  No = false
Response Body Parameters	JSON data for the new version of user details.	

#### **URI ENDPOINT SAMPLE**

https://sitename.bigmachines.com/rest/v5/companies/{companyname}/users/AAP39

### Sample Request Body

```
"login": "AAP39",
  "firstName": "AA39",
  "lastName": "PP39",
  "email": "service2@bigmachines.com",
  "status": 1,
  "type": "FULL_ACCESS",
  "enabledForSso": "NOT_ENABLED",
  "languageCode": "es_ES",
  "currencyCode": "GBP"
}
```

# Update User REST API

Update User REST API		
Description	This operation applies changes to an existing user.	
URI Endpoint	/rest/v5/companies/	/{companyName}/users/{userName}
Endpoint Parameters	{companyName}	The company name associated with the user.  For Host Company users, use _host.  For Partner Organization users, use the Partner Organization company name.
	{userName}	The login ID of the user.
HTTP Method	PATCH	
Request Body	id	The unique identifier of the user.
Parameters	companyId	The company ID to associate with the user.
	type	The type of user.
	language	The language ID to associate with the user.
	languageCode	The language code to associate with the user.
	currency	The currency ID to associate with the user.
	currencyCode	The currency code to associate with the user.
	login	The login ID of the user.
	firstName	The first name of the user.
	lastName	The last name of the user.
	jobTitle	The job title of the user.
	email	The email address of the user.
	phone	The phone number of the user.
	fax	The fax number of the user.
	billFirstName	The billing first name.
	billLastName	The billing last name.
	billCompany	The billing company.
	billCompany2	Additional billing company information.

billAddress1	The billing address.
billAddress2	Additional billing address information.
billCity	The city associated with the billing address.
billStateProvince	The state or province to associated with the billing address.
billZip	The zip code to associate with the billing address.
billCountry	The country to associate with the billing address.
billPhone	The phone number to associate with the billing address.
billFax	The fax number to associate with the billing address.
billEmail	The email address to associate with the billing address.
shipFirstName	The shipping first name.
shipLastName	The shipping last name.
shipCompany	The shipping company.
shipCompany2	Additional shipping company information.
shipAddress1	The shipping address.
shipAddress2	Additional shipping address information.
shipCity	The city associated with the shipping address.
shipStateProvince	The state or province associated with the shipping address.
shipZip	The zip code to associate with the shipping address.
shipCountry	The country to associate with the shipping address.
shipPhone	The phone number to associate with the shipping address.
shipFax	The fax number to associate with the shipping address.
shipEmail	The email address to associate with the shipping address.
timeZone	The time zone of the user.
externalSsoId	The external Single Sign On ID to associate with the user.
approvalDelegate	The approval delegate associated with the user.
separateShipAddr	Is there a separate shipping address for the user? Yes = true

		No = false
	isNotifyEmail	Is the notification preference email?
		Yes = true
		No = false
	isNotifyFax	Is the notification preference fax?
		Yes = true
		No = false
	isSuperUserPermEna	Is superuser permission enabled?
	bled	Yes = true
		No = false
	isWebServicesOnly	Is Web Services Only enabled?
		Yes = true
		No = false
	numberFormatId	The number format ID.
	units	The user's unit-type preference.
	datePreId	The user's date preference.
	status	The status of the user.
	enabledForSso	The Single Sign-On information associated with the user.
	isAccessAdminPremE	Is Access Admin permissions enabled?
	nabled	Yes = true
		No = false
	isProxyPermEnabled	Are proxy permissions enabled?
		Yes = true
		No = false
Success Response	HTTP Code 204	

# URI ENDPOINT SAMPLE

https://sitename.bigmachines.com/rest/v5/companies/{companyname}/users/AAP39

# Sample Request BODY

```
"login": "AAP39",
"firstName": "AA39",
"lastName": "PP39",
"email": "service2@bigmachines.com",
"status": 1,
"type": "FULL_ACCESS",
"enabledForSso": "NOT_ENABLED",
"languageCode": "es_ES",
"currencyCode": "GBP"
}
```

### Reset User Password REST API

Reset User Password REST API		
Description	This operation creates a temporary password and sends it to the user's email.	
URI Endpoint	/rest/v6/companies/{companyname}/users/{userName}/actions/resetPassword	
Endpoint Parameters	{companyName}	The company name of the user.  For Host Company users, use _host  For Partner Organization users, use the Partner  Organization company name.
	{userName}	The login ID of the user.
HTTP Method	POST	'
Request Body Parameters	password	Password is required only for Services, Developer, and Guest Company users. Password is not required in the Request Body for all other users, such as Host Company or Partner Organization users.
		For users of type BM_SUPPORT (Services), BM_ADMIN (Developer) and Guest Company users, the password is reset to the value sent in request payload. For other users, the password is reset by CPQ Cloud and sent to the user's corresponding email. The Input Payload in this case will be blank.
Success Response	HTTP Code 200	

### **URI ENDPOINT SAMPLE**

https://sitename.bigmachines.com/rest/v6/companies/{companyname}/users/(user Name}/actions/resetPassword

# Sample Request Body

{"password" : "someString"}

#### Support for Currency and Language Codes in User REST APIs

The User REST APIs introduced in CPQ Cloud Release 18D support currency and language codes and IDs in the input and response payloads. Since currency IDs and language IDs are unique to CPQ Cloud, integrating with external applications requires the use of currency and language codes in the User REST APIs to set currency and language preferences for users.

- The support for Currency Codes and Language Codes is added in the User REST APIs with REST v5 and above.
- When integrating with an external application, the User REST APIs are available via Oracle Integration Cloud Service (ICS) CPQ Adapter for REST API Services.
- When both a currency code and currency ID are provided in the payload, the currency code takes precedence. When both a language code and a language ID are provided in the payload, the language code takes precedence.

# Supported Currency Codes

The currency codes supported in the User REST APIs are shown below.

Currency Name	Currency Code	Currency Name	Currency Code
Afghani	AFN	Central African CFA Franc	XAF
Afghani (deprecated)	AFA	Chilean Peso	CLP
Algerian Dinar	DZD	Chinese Yuan Renminbi	CNY
Antillean Guilder	ANG	Columbian Peso	СОР
Argentine Peso	ARS	Comoro Franc	KMF
Armenian Dram	AMD	Congolese Franc	CDF
Australian Dollan	AUD	Convertible Mark	BAM
Ariary	MGA	Cordoba	NIO
Bahamian Dollar	BSD	Costa Rican Colon	CRC
Bahraini Dinar	BHD	Crown	CZK
Baht	ТНВ	Cuban Peso	CUP
Balboa	PAB	Dalasi	GMD
Barbados Dollar	BBD	Danish Krone	DKK
Belarusian Ruble	BYR	Denar	MKD
Belize Dollar	BZD	Deutsche Mark (deprecated)	DEM
Bermudian Dollar	BMD	Dirham	MAD
Birr	ETB	Djiboutian Franc	DJF
Bolivar Fuerte	VEF	Dobra	STD
Bolivian Mvdol	BOV	Dominican Peso	DOP
Boliviano	ВОВ	Drachma (deprecated)	GRD
Brazilian Real	BRL	East Caribbean Dollar	XCD
Brunei Ringgit	BND	Egyptian Pound	EGP
Burundian Franc	BIF	Emirati Dirham	AED
Canadian Dollar	CAD	Eritrean Nakfa	ERN
Cape Verde Escudo	CVE	Escudo (deprecated)	PTE
Cayman Islands Dollar	KYD	Estonian Kroon (deprecated)	EEK
Cedi	GHS	Euro	EUR

Currency Name	Currency Code	Currency Name	Currency Code
Falkland Island Pound	FKP	Lari	GEL
Fiji Dollar	FJD	Lat	LVL
Florin	AWG	Lebanese Pound	LBP
Forint	HUF	Lek	ALL
Franc	CFAF	Lempira	HNL
Franc (deprecated)	BEF	Leone	SLL
Franc (deprecated)	FRF	Leu	MDL
Gibraltar Pound	GIP	Leu (deprecated)	ROL
Gourde	HTG	Lev	BGN
Guarani	PYG	Leva (deprecated)	BGL
Guilder (deprecated)	NLG	Liberian Dollar	LRD
Guinean Franc	GNF	Libyan Dinar	LYD
Guyanese Dollar	GYD	Lilangeni	SZL
Hong Kong Dollar	HKD	Lira (deprecated)	ITL
Hryvnia	UAH	Litas	LTL
Icelandic Krona	ISK	Loti	LSL
Indian Rupee	INR	Luxembourg Franc (deprecated)	LUF
Indonesian Rupiah	IDR	Malagasy Francs (deprecated)	MGF
Iraqi Dinar	IQD	Malaysian Ringgit	MYR
Jamaica Dollar	JMD	Mali Franc (deprecated)	MLF
Japanese Yen	JPY	Malta Lira (deprecated)	MTL
Jordan Dinar	JOD	Manat	AZN
Kenya Shilling	KES	Markka (deprecated)	FM
Kina	PGK	Mauritius Rupee	MUR
Kuna	HRK	Metical	MZN
Kuwaiti Dinar	KWD	Metical (deprecated)	MZM
Kwacha	MWK	Mexican Unidad de Inversion	MXV
Kwacha	ZMW	Naira	NGN
Kwanza	AOA	Namibian Dollar	NAD
Kyat	ММК	Nepalese Rupee	NPR
		New sol	PEN

Currency Name	Currency Code	Currency Name	Currency Code
New kip	LAK	Singapore Dollar	SGD
New Riel	KHR	Slovak Koruna (deprecated)	SKK
New Shekel	ILS	Solomon Island Dollar	SBD
New Zealand Dollar	NZD	Som	KGS, UZS
Ngultrum	BTN	Somali Shilling	SOS
Niger Franc	XOF	Somoni	TJS
North Korean Won	KPW	South African Rand	ZAR
Norwegian Krone	NOK	South Korean Won	KRW
Omani Rial	OMR	Sri Lankan Rupee	LKR
Ouguiya	MRO	Sudanese Dinar (deprecated)	SDP
Paanga	ТОР	Sudanese Pound	SDG
Pakistani Rupee	PKR	Surinamese Dollar	SRD
Pataca	МОР	Swiss Franc	CHF
Peseta (deprecated)	ESP	Swedish Krona	SEK
Peso	MXN	Syrian Pound	SYP
Philippine Peso	PHP	Taka	BDT
Pula	BWP	Tala	WST
Punt (deprecated)	IEP	Tenge	KZT
Qatar Riyal	QAR	Taiwan Dollar	TWD
Quetzal	GTQ	Tanzanian Shilling	TZS
Rial	IRR, YER	Tolar (deprecated)	SIT
Riyal	SAR	Trinidad and Tobago Dollar	TTD
Romanian New Leu	RON	Tugrik	MNT
Ruble	RUB	Tunisian Dinar	TND
Rufiyaa	MVR	Turkish Lira	TRY
Rwanda Franc	RWF	Turkish Lira (deprecated)	TRL
Saint Helena Pound	SHP	Turkmenistani Manat	TMT
Schilling (deprecated)	ATS	Ugandan Shilling	UGX
Serbian Dinar	RSD	Unidad de Fomento	CLF
Seychelles Rupee	SCR	United Kingdom Pound	GBP

Currency Name	Currency Code
Uruguayan Peso	UYU
US Dollar	USD
Vatu	VUV
Vietnamese Dong	VND
Yugoslav Dinar	YUM
Yugoslav Dinar (deprecated)	YUM
Zimbabwean Dollar	ZWL
Zimbabwean Dollar (deprecated)	ZWD
Zioty	PLN
Zioty (deprecated)	PLZ

# Supported Language Codes

The language codes supported in the User REST APIs are shown below.

Language Name	Language Code	Language Name	Language Code
Albanian [Albania]	sq_AL	Danish [Denmark]	da_DK
Arabic [Algeria]	ar_DZ	Dutch [Belgium]	nl_BE
Arabic [Bahrain]	ar_BH	Dutch [Netherlands]	nl_NL
Arabic [Egypt]	ar_EG	English	en_US
Arabic [Iraq]	ar_IQ	English [Australia]	en_AU
Arabic [Jordan]	ar_JO	English [Canada]	en_CA
Arabic [Kuwait]	ar_KW	English [India]	en_IN
Arabic [Lebanon]	ar_LB	English [Ireland]	en_IE
Arabic [Libya]	ar_LY	English [Malta]	en_MT
Arabic [Morocco]	ar_MA	English [New Zealand]	en_NZ
Arabic [Oman]	ar_OM	English [Philippines]	en_PH
Arabic [Qatar]	ar_QA	English [Singapore]	en_SG
Arabic [Saudi Arabia]	ar_SA	English [South Africa]	en_ZA
Arabic [Sudan]	ar_SD	English [United Kingdom]	en_GB
Arabic [Syria]	ar_SY	Estonian [Estonia]	et_EE
Arabic [Tunisia]	ar_TN	Finnish [Finland]	fi_FL
Arabic [United Arab Emirates]	ar_AE	French	fr_FR
Arabic [Yemen]	ar_YE	French [Belgium]	fr_BE
Belarusian [Belarus]	be_BY	French [Canada]	fr_CA
Bulgarian [Bulgaria]	bg_BG	French [Luxembourg]	fr_LU
Catalan [Spain]	ca_ES	French [Switzerland]	fr_CH
Chinese (Simplified) [China]	zh_CN	German	de_DE
Chinese (Simplified) [Singapore]	zh_SG	German [Austria]	de_AT
Chinese (Traditional) [Hong Kong]	zh_HK	German [Luxembourg]	de_LU
Chinese (Traditional) [Taiwan]	zh_TW	German [Switzerland]	de_CH
Croatian [Croatia]	hr_HR	Greek [Cyprus]	el_CY
Czech [Czech Republic]	cs_CZ	Greek [Greece]	el_GR

Language Name	Language Code	Language Name	Language Code
Hebrew [Israel]	iw_IL	Spanish	es_ES
Hindi [India]	hi_IN	Spanish [Argentina]	es_AR
Hungarian [Hungary]	hu_HU	Spanish [Bolivia]	es_BO
Icelandic [Iceland]	is_IS	Spanish [Chile]	es_CL
Indonesian [Indonesia]	in_ID	Spanish [Colombia]	es_CO
Irish [Ireland]	ga_IE	Spanish [Costa Rica]	es_CR
Italian	it_IT	Spanish [Dominican Republic]	es_DO
Italian [Switzerland]	it_CH	Spanish [Ecuador]	es_EC
Japanese (Imperial Calendar) [Japan]	ja_JP_JP	Spanish [El Salvador]	es_SV
Japanese [Japan]	ja_JP	Spanish [Guatemala]	es_GT
Korean [Korea]	ko_KR	Spanish [Honduras]	es_HT
Latvian [Latvia]	lv_LV	Spanish [Mexico]	es_MX
Lithuanian [Lithuania]	lt_LT	Spanish [Nicaragua]	es_NI
Macedonian [Macedonia]	mk_MK	Spanish [Panama]	es_PA
Malay [Malaysia]	ms_MY	Spanish [Paraguay]	es_PY
Maltese [Malta]	mt_MT	Spanish [Peru]	es_PE
Norwegian (Bokmal)[Norway]	no_NO	Spanish [Puerto Rico]	es_PR
Norwegian (Nynorsk)[Norway]	no_NO_NY	Spanish [US]	es_US
Polish [Poland]	pl_PL	Spanish [Uruguay]	es_UY
Portuguese [Brazil]	pt_BR	Spanish [Venezuela]	es_VE
Portuguese [Portugal]	pt_PT	Swedish [Sweden]	sv_SE
Romanian [Romania]	ro_RO	Thai (Thai digits) [Thailand]	th_TH_TH
Russian [Russia]	ru_RU	Thai (Western digits) [Thailand]	th_TH
Serbian [Bosnia and Herzegovina]	sr_BA	Turkish [Turkey]	tr_TR
Serbian [Serbia and Montenegro]	sr_CS	Ukranian [Ukraine]	uk_UA
Slovak	sk_SK	Vietnamese [Vietnam]	vi_VN
Slovenian [Slovenia]	sl_SL		

#### STEPS TO ENABLE

The Oracle IDCS Integration enhancements are automatically available on all CPQ Cloud 18D sites.

#### TIPS AND CONSIDERATIONS

Consider the following tips when using the Oracle IDCS Integration enhancements:

• In the ICS integration, a new Users category is available. The GET, UPSERT, and UPDATE HTTP Methods are under **User**. The Update for Reset Password HTTP Method is under **User**: **Action**: **Reset Password**. The POST HTTP Method is under **User**: **Collection**.

### **KEY RESOURCES**

CPQ Cloud Administration Online Help