

Data History Example

Id	Change type	Change performed by the user	Script code	Change tracked by the Data History ext	Initial State tracked by the Data History ext
1	Simple Value property, update	\$client DataObject with entityId 123 Change \$client.name from 'Mark' to 'Steve'	\$client.name := 'Steve';	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = Mark - oldDisplayValue = Mark - oldValueType = String - newValue = Steve - newDisplayValue = Steve - newValueType = String - propertyName = name - propertyType = String - propertyCollectionType = None	
2	Collection of Simple Values property, assign collection	\$client DataObject with entityId 123 Set empty countries property to ['IT', 'CH'] The collection ['IT', 'CH'] has entityId 456	\$client.countries := ['IT', 'CH'];String;	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = 999 - oldDisplayValue = {} - oldValueType = Indexed String - newValue = 456 - newDisplayValue = {"1":"IT","2":"CH"} - newValueType = Indexed String - propertyName = countries - propertyType = String - propertyCollectionType = Indexed	InitialState - entityId = 456 - entityType = String - entityCollectionType = Indexed - displayValue = {"1":"IT","2":"CH"}
3	Collection of Simple Values property, add element	\$client DataObject with entityId 123 Append new element 'FR' to countries collection ['IT', 'CH'] The collection has entityId 456	\$client.countries.addElement('FR');	IndexedCollectionChange - entityId = 456 - entityType = Indexed String - oldValue = - oldDisplayValue = - oldValueType = - newValue = FR - newDisplayValue = FR - newValueType = String - position = 3 - action = ADD	
4	Collection of Simple Values property, remove element	\$client DataObject with entityId 123 Remove element 'IT' from countries collection ['IT', 'CH', 'FR'] The collection has entityId 456	\$client.countries.removeElement('IT');	IndexedCollectionChange - entityId = 456 - entityType = Indexed String - oldValue = IT - oldDisplayValue = IT - oldValueType = String - newValue = - newDisplayValue = - newValueType = - position = 1 - action = REMOVE	

5	Collection of Simple Values property, move element	\$client DataObject with entityId 123 Move element 'CH' at first position in collection ['IT', 'CH', 'FR'] The collection has entityId 456	\$client.countries.moveElement('CH', false);	IndexedCollectionChange - entityId = 456 - entityType = Indexed String - oldValue = IT - oldDisplayValue = IT - oldValueType = String - newValue = CH - newDisplayValue = CH - newValueType = String - position = 1 - action = UPDATE IndexedCollectionChange - entityId = 456 - entityType = Indexed String - oldValue = CH - oldDisplayValue = CH - oldValueType = String - newValue = IT - newDisplayValue = IT - newValueType = String - position = 2 - action = UPDATE	
6	Complex Value property, initialize with new object	\$client DataObject with entityId 123 Set null mainAddress property to new Address The new Address Data Object has entityId 789	\$client.mainAddress := new Address;	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = - oldDisplayValue = null - oldValueType = - newValue = 789 - newDisplayValue = {"city": "null", "street": "null"} - newValueType = Address - propertyName = mainAddress - propertyType = Address - propertyCollectionType = None	InitialState - entityId = 789 - entityType = Address - entityCollectionType = None - displayValue = {"city": "null", "street": "null"}
7	Complex Value property, initialize with existing object	\$client DataObject with entityId 123 \$address DataObject with entityId 789 Set null mainAddress property to \$address	\$client.mainAddress := \$address;	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = - oldDisplayValue = null - oldValueType = - newValue = 789 - newDisplayValue = {"city": "New York", "street": "123 Washington St"} - newValueType = Address - propertyName = mainAddress - propertyType = Address - propertyCollectionType = None	InitialState - entityId = 789 - entityType = Address - entityCollectionType = None - displayValue = {"city": "New York", "street": "123 Washington St"} note: this is created only if Address 789 was not being tracked before
8	Complex Value property, set new target	\$client DataObject with entityId 123 with Address DataObject with entityId 789 in the property mainAddress \$otherAddress DataObject with entityId 234 Set mainAddress property to \$otherAddress	\$client.mainAddress := \$otherAddress;	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = 789 - oldDisplayValue = {"city": "New York", "street": "123 Washington St"} - oldValueType = Address - newValue = 243 - newDisplayValue = {"city": "Chiasso", "street": "Corso San Gottardo"} - newValueType = Address - propertyName = mainAddress - propertyType = Address - propertyCollectionType = None	InitialState - entityId = 234 - entityType = Address - entityCollectionType = None - displayValue = {"city": "Chiasso", "street": "Corso San Gottardo"} note: this is created only if Address 234 was not being tracked before
9	Complex Value property, update value in a property of the target	\$client DataObject with entityId 123 containing \$address DataObject with entityId 789 in the mainAddress property Change \$client.mainAddress.city from 'NewYork' to 'Zurich'	\$client.mainAddress.city := 'Zurich';	DataClassInstanceChange - entityId = 789 - entityType = Address - oldValue = NewYork - oldDisplayValue = NewYork - oldValueType = String - newValue = Zurich - newDisplayValue = Zurich - newValueType = String - propertyName = city - propertyType = String - propertyCollectionType = None	

10	Collection of Complex Values property, initialize with collection of existing objects	\$client DataObject with entityId 123 \$address1 DataObject with entityId 234 \$address2 DataObject with entityId 345 Set addresses property to { 'main'=\$address1, 'secondary'=\$address2 } The collection { 'main'=\$address1, 'secondary'=\$address2 } has entityId 456	\$client.addresses := { 'main'=\$address1, 'secondary'=\$address2 }; Address;	DataClassInstanceChange - entityId = 123 - entityType = Client - oldValue = 999 - oldDisplayValue = {} - oldValueType = Named Address - newValue = 456 - newDisplayValue = { "main": "@ref=Address/234", "secondary": "@ref=Address/345" } - newValueType = Named Address - propertyName = addresses - propertyType = Address - propertyCollectionType = Named	InitialState - entityId = 456 - entityType = Address - entityCollectionType = Named - displayValue = { "main": "@ref=Address/234", "secondary": "@ref=Address/345" } InitialState - entityId = 234 - entityType = Address - entityCollectionType = None - displayValue = { "city": "Chiasso", "street": "Corso San Gottardo" } note: this is created only if Address 234 was not being tracked before InitialState - entityId = 345 - entityType = Address - entityCollectionType = None - displayValue = { "city": "New York", "street": "123 Washington St" } note: this is created only if Address 345 was not being tracked before
11	Collection of Complex Values property, add element	\$client DataObject with entityId 123 and addresses property containing two addresses with entityId 234 and 345 Add \$address3 DataObject with entityId 567 to the addresses collection at key 'other' The collection has entityId 456	\$client.addresses.setElement('other', \$address3);	NamedCollectionChange (extends Change) - entityId = 456 - entityType = Named Address - oldValue = - oldDisplayValue = - oldValueType = - newValue = 567 - newDisplayValue = { "city": "New York", "street": "123 Washington St" } - newValueType = Address - key = other - action = ADD	InitialState - entityId = 567 - entityType = Address - entityCollectionType = None - displayValue = { "city": "New York", "street": "123 Washington St" } note: this is created only if Address 567 was not being tracked before
12	Collection of Complex Values property, set element to null	\$client DataObject with entityId 123 and addresses property containing three addresses with entityId 234, 345 and 567 Update element at key 'main' from Address with entityId 234 to null The collection has entityId 456	\$client.addresses.setElement('main', null);	NamedCollectionChange (extends Change) - entityId = 456 - entityType = Named Address - oldValue = 234 - oldDisplayValue = { "city": "Chiasso", "street": "Corso San Gottardo" } - oldValueType = Address - newValue = - newDisplayValue = null - newValueType = - key = main - action = UPDATE	
13	Collection of Complex Values property, remove element	\$client DataObject with entityId 123 and addresses property containing three addresses with entityId 234, 345 and 567 Remove address at key 'main' (entityId 234) The collection has entityId 456	\$client.addresses.removeElement('main');	NamedCollectionChange (extends Change) - entityId = 456 - entityType = Named Address - oldValue = 234 - oldDisplayValue = { "city": "Chiasso", "street": "Corso San Gottardo" } - oldValueType = Address - newValue = - newDisplayValue = - newValueType = - key = main - action = REMOVE	

14	Collection of Complex Values property, update property of one element	\$client DataObject with entityId 123 and addresses property containing three addresses with entityId 234, 345 and 567 Set city of Address at key 'main' (entityId 234) from 'NewYork' to 'Zurich' The collection has entityId 456	\$client.addresses['main'].city := 'Zurich';	DataClassInstanceChange • entityId = 234 • entityType = Address • oldValue = NewYork • oldDisplayValue = NewYork • oldValueType = String • newValue = Zurich • newDisplayValue = Zurich • newValueType = String • propertyName = city • propertyType = String • propertyCollectionType = None	
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