jUCMNav Report

http://softwareengineering.ca/jucmnav

Title:	SimplePhoneSystem-WithFI
URN Model Name:	URNspec
Description:	
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UCM Scenario Groups documentation

- BasicCall:
    1. BCsuccess: Normal scenario, no feature, successful ringing
    2. BCbusy
- OCS:
    1. OCSsuccess
    2. OCSbusy
    3. OCSdenied
- CND:
    1. CNDdisplay
    2. CNDbusy
- TeenLine:
    1. TLnotActiveSuccess
    2. TLActiveSuccess
    3. TLActiveTimeOut
    4. TLActiveInvalidPIN
    5. TLActiveBusy
    6. TLnotActiveBusy
- FI_OCS_CND:
    1. OCS_CND_display
    2. OCS_CND_busy
    3. OCS_CND_OnList
- FI_TL_CND:
    1. BasicDefinitions: Initial start point, initial values, no end point. Do not run.
    2. TL_CND_NotActiveDisplay
    3. TL_CND_ActiveDisplay
    4. TL_CND_TimeOut
    5. TL_CND_InvalidPIN
    6. TL_CND_NotActiveBusy
    7. TL_CND_ActiveBusy
- FI_OCS_TL:
    1. Scenario2732

Variables
    1. Busy (boolean): The terminating party is busy
    2. OnOCSlist (boolean): The terminating party is on the OCS filtering list
    3. PINvalid (boolean): The TeenLine PIN provided is valid
    4. TLactive (boolean): TeenLine is active at this time
    5. SubCND (boolean): The terminator is subscribed to CND
    6. SubOCS (boolean): The originator is subscribed to OCS
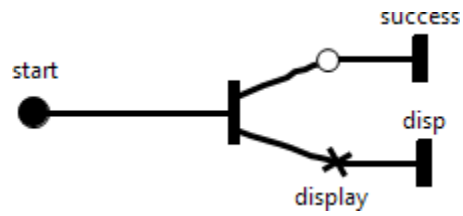   7. SubTL (boolean): The originator is subscribed to TeenLine

CND

Figure 1 - CND

Description

Call Name Delivery feature. Displays the originator's info on the terminator's device.

Responsibilities

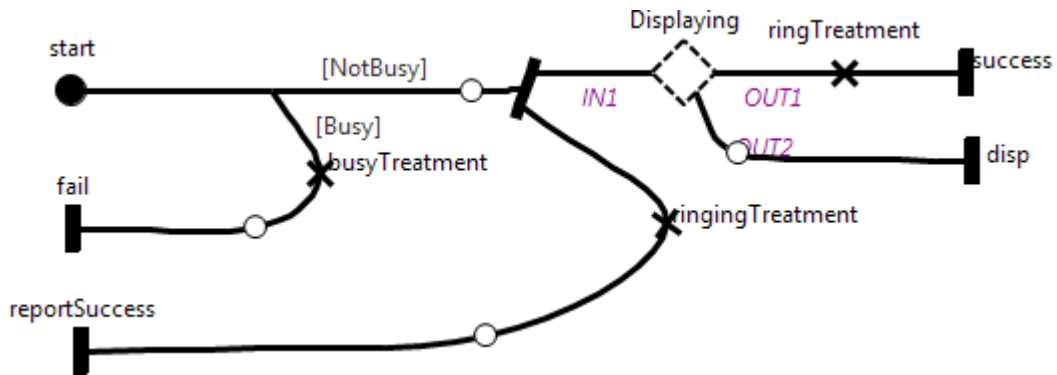display: Displays the originator's number.

TerminatingFeatures

Figure 2 - TerminatingFeatures

Description

Handles the terminating features, including the basing rigning of the device.

Responsibilities

ringingTreatment: This user is available. Prepares the ringback signal.

busyTreatment: This user is busy and cannot answer. Prepares busy signal.

ringTreatment: Prepares the ring signal

Stubs

Dynamic Stub - Displaying

   Plugin Map - Default
     Input Bindings:
       IN 1 <-> start
     Output Bindings:
       OUT 1 <-> continue
     Precondition:
       Expression: !SubCND
     Transaction: false
     Probability: 1.0

   Plugin Map - CND

Input Bindings:

    IN 1 <-> start

Output Bindings:

    OUT 1 <-> success

    OUT 2 <-> disp

Precondition:

   Expression: SubCND

Transaction: false

Probability: 1.0

Or Fork Description

[NotBusy] ==> !Busy (probability: 1.0)
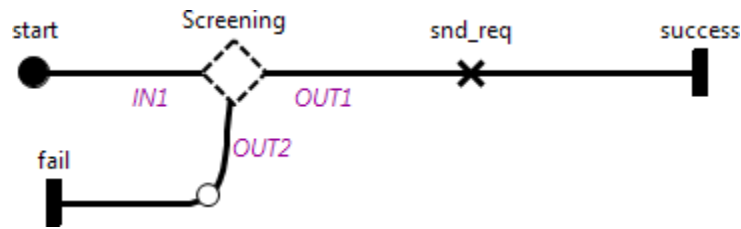
[Busy] ==> Busy (probability: 1.0)

OriginatingFeatures

Figure 3 - OriginatingFeatures

Description

Handles the originating features. Sends the request to the terminating agent, if allowed to

Responsibilities

snd_req: Send the connection request to the terminating agent.

Stubs

Dynamic Stub - Screening: Screening function stub

Plugin Map - Default
 Input Bindings:
  IN 1 <-> start
 Output Bindings:
  OUT 1 <-> continue
 Precondition:
  Expression: !(SubOCS || SubTL)
 Transaction: false
 Probability: 1.0

Plugin Map - OCS
 Input Bindings:
  IN 1 <-> start
 Output Bindings:
  OUT 1 <-> success
  OUT 2 <-> fail
 Precondition:
  Expression: SubOCS

Transaction: false
Probability: 1.0

Plugin Map - TeenLine
Input Bindings:
   IN 1 <-> start
Output Bindings:
   OUT 1 <-> success
   OUT 2 <-> fail
Precondition:
   Expression: SubTL
Transaction: false
Probability: 1.0
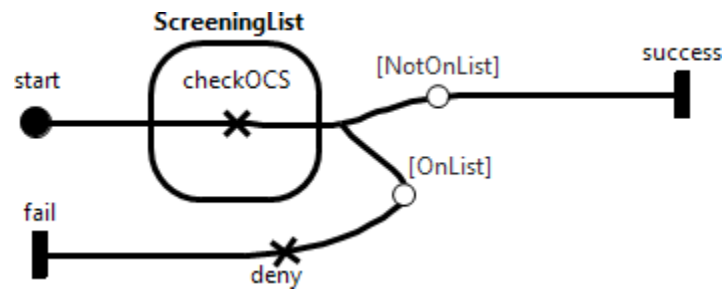
OCS

Figure 4 - OCS

Description

Originating Call Screening. Checks a filtering list to determine whether the connection should be denied.

Responsibilities

checkOCS: Checks whether the terminator is on the originator's screening list

deny: Denies the connection

Or Fork Description

[NotOnList] ==> !OnOCSlist (probability: 1.0)
[OnList] ==> OnOCSlist (probability: 1.0)

TeenLine
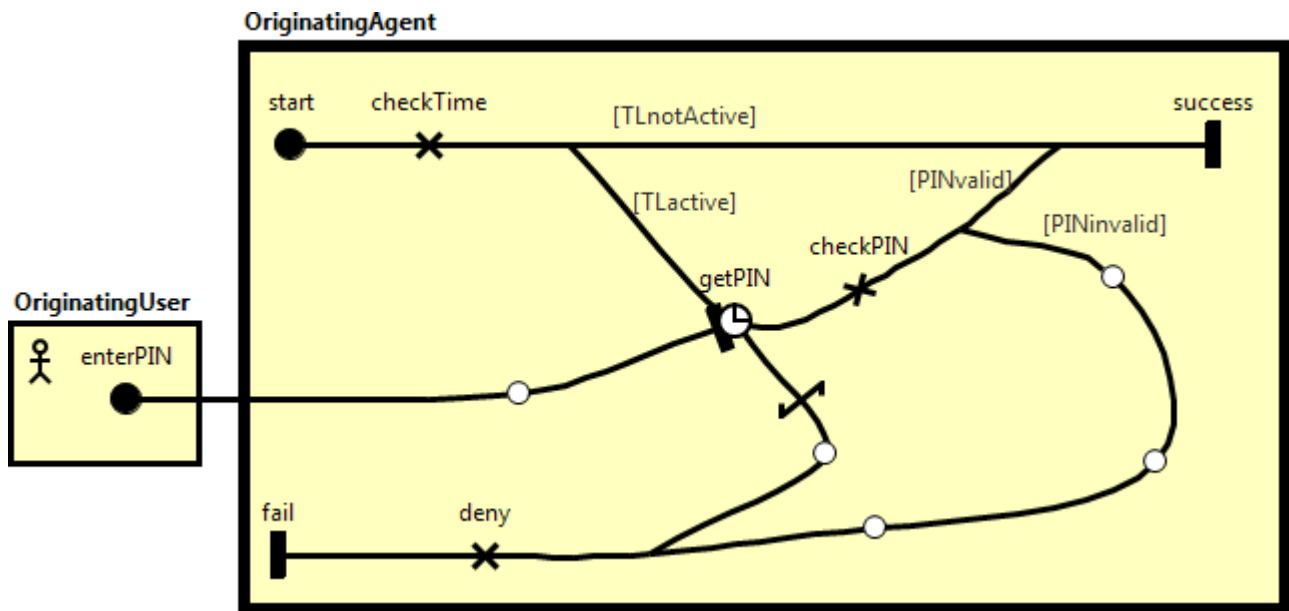
Figure 5 - TeenLine

Description

TeenLine denies a connection when attempted during a predefined time range (ex. between 7pm and 6am), unless a valid PIN is provided in a timely fashion

Responsibilities

checkTime: Checks that TeenLine is active, i.e. that the connection is in the pre-defined time range

checkPIN: Checks whether the PIN is valid

deny: Denies the connection

Or Fork Description

[TLnotActive] ==> !TLactive (probability: 1.0)
[TLactive] ==> TLactive (probability: 1.0)

[PINvalid] ==> PINvalid (probability: 1.0)
[PINinvalid] ==> !PINvalid (probability: 1.0)

Default
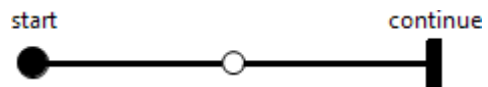
Figure 6 - Default

Description

Default behaviour that can be overriden

SimpleConnection
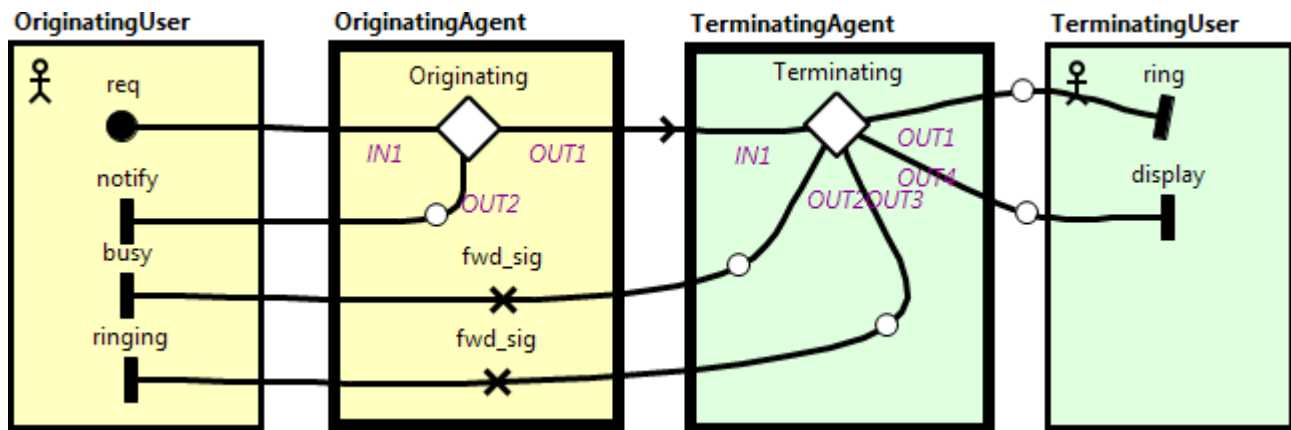
Figure 7 - SimpleConnection

Description

Call connection model. An originating user attempts a connection to a terminating user. Both users have their own agent, which handles their features.

Responsibilities

fwd_sig: Forwards any signal received from other agents

fwd_sig: Forwards any signal received from other agents

Stubs

Static Stub - Originating: Originating Features Stub

Plugin Map - OriginatingFeatures
   Input Bindings:
      IN 1 <-> start
   Output Bindings:
      OUT 1 <-> success
      OUT 2 <-> fail
   Precondition:
      Expression: true
   Transaction: false
   Probability: 1.0

Static Stub - Terminating: Terminating Features Stub

Plugin Map - TerminatingFeatures

Input Bindings:

IN 1 <-> start

Output Bindings:

OUT 1 <-> success

OUT 2 <-> fail

OUT 3 <-> reportSuccess

OUT 4 <-> disp

Precondition:

Expression: true

Transaction: false

Probability: 1.0

Start Point

req: A call request to a terminating party is done

End Points

ring: A call request is announced

display: The originator's information is displayed

Scenario Documentation

Scenario Execution Summary

Group BasicCall (ID:5)

Scenario	Result	Message(s)
BCsuccess (ID: 6)	PASSED	
BCbusy (ID: 2416)	PASSED	

Group OCS (ID:2418)

Scenario	Result	Message(s)
OCSsuccess (ID: 2419)	PASSED	
OCSbusy (ID: 2420)	PASSED	
OCSdenied (ID: 2421)	PASSED	

Group CND (ID:2423)

Scenario	Result	Message(s)
CNDdisplay (ID: 2424)	PASSED	
CNDbusy (ID: 2425)	PASSED	

Group TeenLine (ID:2426)

Scenario	Result	Message(s)
TLnotActiveSuccess (ID: 2427)	PASSED	
TLActiveSuccess (ID: 2428)	PASSED	
TLActiveTimeOut (ID: 2429)	PASSED	
TLActiveInvalidPIN (ID: 2430)	PASSED	
TLActiveBusy (ID: 2431)	PASSED	
TLnotActiveBusy (ID: 2432)	PASSED	

Group FI_OCS_CND (ID:2433)

Scenario	Result	Message(s)
OCS_CND_display (ID: 2434)	PASSED	
OCS_CND_busy (ID: 2435)	PASSED	
OCS_CND_OnList (ID: 2436)	PASSED	

Group FI_TL_CND (ID:2437)

Scenario	Result	Message(s)
BasicDefinitions (ID: 2438)	PASSED	

TL_CND_NotActiveDisplay (ID: 2439)	PASSED	
TL_CND_ActiveDisplay (ID: 2440)	PASSED	
TL_CND_TimeOut (ID: 2441)	PASSED	
TL_CND_InvalidPIN (ID: 2442)	PASSED	
TL_CND_NotActiveBusy (ID: 2443)	PASSED	
TL_CND_ActiveBusy (ID: 2444)	PASSED	

Group FI_OCS_TL (ID:2445)

Scenario	Result	Message(s)
Scenario2732 (ID: 2732)	FAILED	Traversal has multiple alternatives at Stub "Screening (1049)". Taking first option to remain deterministic.
		Race condition symptom: connected path arrived at a non-blocked path.

Scenario Information

Group BasicCall (ID: 5)

Scenario BCsuccess (ID: 6)

Scenario Start Point(s):
req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false

Scenario End Point(s):
ring (ID: 32): A call request is announced
ringing (ID: 953)

Scenario BCbusy (ID: 2416)

Scenario Start Point(s):
req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false

| SubTL | 2060 | The originator is subscribed to TeenLine | boolean | false |
| Busy | 2054 | The terminating party is busy | boolean | true |

Scenario End Point(s):

busy (ID: 933)

Group OCS (ID: 2418)

Scenario OCSsuccess (ID: 2419)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubOCS	2059	The originator is subscribed to OCS	boolean	true
SubTL	2060	The originator is subscribed to TeenLine	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false
Busy	2054	The terminating party is busy	boolean	false
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	false

Scenario OCSbusy (ID: 2420)

Included UCM Scenario(s):

Scenario OCSsuccess (ID: 2419)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value

Busy	2054	The terminating party is busy	boolean	true

Scenario OCSdenied (ID: 2421)

Included UCM Scenario(s):
Scenario OCSsuccess (ID: 2419)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	true

Group CND (ID: 2423)

Scenario CNDdisplay (ID: 2424)

Scenario Start Point(s):
req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubCND	2058	The terminator is subscribed to CND	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	false
Busy	2054	The terminating party is busy	boolean	false

Scenario End Point(s):
display (ID: 978): The originator's information is displayed
ring (ID: 32): A call request is announced

ringing (ID: 953)

Scenario CNDbusy (ID: 2425)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubCND	2058	The terminator is subscribed to CND	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	false
Busy	2054	The terminating party is busy	boolean	true

Scenario End Point(s):

busy (ID: 933)

Group TeenLine (ID: 2426)

Scenario TLnotActiveSuccess (ID: 2427)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
TLactive	2057	TeenLine is active at this time	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false

SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true
Busy	2054	The terminating party is busy	boolean	false

Scenario End Point(s):

ring (ID: 32): A call request is announced

ringing (ID: 953)

Scenario TLActiveSuccess (ID: 2428)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	false
TLactive	2057	TeenLine is active at this time	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true

Scenario End Point(s):

ring (ID: 32): A call request is announced

ringing (ID: 953)

Scenario TLActiveTimeOut (ID: 2429)

Scenario Start Point(s):
req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true
TLactive	2057	TeenLine is active at this time	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true

Scenario End Point(s):
notify (ID: 750)

Scenario TLActiveInvalidPIN (ID: 2430)

Scenario Start Point(s):
req (ID: 30): A call request to a terminating party is done
enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	false
PINvalid	2056	The TeenLine PIN provided is valid	boolean	false

TLactive	2057	TeenLine is active at this time	boolean	true
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true

Scenario End Point(s):

notify (ID: 750)

Scenario TLActiveBusy (ID: 2431)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true
TLactive	2057	TeenLine is active at this time	boolean	true
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true

Scenario End Point(s):

busy (ID: 933)

Scenario TLnotActiveBusy (ID: 2432)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	true
TLactive	2057	TeenLine is active at this time	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	true

Scenario End Point(s):

busy (ID: 933)

Group FI_OCS_CND (ID: 2433)

Scenario OCS_CND_display (ID: 2434)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	false

SubCND	2058	The terminator is subscribed to CND	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	true
Busy	2054	The terminating party is busy	boolean	false
SubTL	2060	The originator is subscribed to TeenLine	boolean	false

Scenario End Point(s):

ring (ID: 32): A call request is announced

ringing (ID: 953)

display (ID: 978): The originator's information is displayed

Scenario OCS_CND_busy (ID: 2435)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	true
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	true
SubTL	2060	The originator is subscribed to TeenLine	boolean	false
SubOCS	2059	The originator is subscribed to OCS	boolean	true

Scenario End Point(s):

busy (ID: 933)

Scenario OCS_CND_OnList (ID: 2436)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	true
SubCND	2058	The terminator is subscribed to CND	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	true
SubTL	2060	The originator is subscribed to TeenLine	boolean	false

Scenario End Point(s):

notify (ID: 750)

Group FI_TL_CND (ID: 2437)

Scenario BasicDefinitions (ID: 2438)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubTL	2060	The originator is subscribed to TeenLine	boolean	true
SubOCS	2059	The originator is subscribed to OCS	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	true

TLactive	2057	TeenLine is active at this time	boolean	false
PINvalid	2056	The TeenLine PIN provided is valid	boolean	false
Busy	2054	The terminating party is busy	boolean	false

Scenario TL_CND_NotActiveDisplay (ID: 2439)

Included UCM Scenario(s):
Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Scenario End Point(s):
ring (ID: 32): A call request is announced

ringing (ID: 953)

display (ID: 978): The originator's information is displayed

Scenario TL_CND_ActiveDisplay (ID: 2440)

Included UCM Scenario(s):
Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Scenario Start Point(s):
enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
TLactive	2057	TeenLine is active at this time	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true

Scenario End Point(s):
ring (ID: 32): A call request is announced

ringing (ID: 953)

display (ID: 978): The originator's information is displayed

Scenario TL_CND_TimeOut (ID: 2441)

Included UCM Scenario(s):

Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
TLactive	2057	TeenLine is active at this time	boolean	true

Scenario End Point(s):

notify (ID: 750)

Scenario TL_CND_InvalidPIN (ID: 2442)

Included UCM Scenario(s):

Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Scenario Start Point(s):

enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
TLactive	2057	TeenLine is active at this time	boolean	true

Scenario End Point(s):

notify (ID: 750)

Scenario TL_CND_NotActiveBusy (ID: 2443)

Included UCM Scenario(s):

Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	true

Scenario End Point(s):

busy (ID: 933)

Scenario TL_CND_ActiveBusy (ID: 2444)

Included UCM Scenario(s):

Scenario BasicDefinitions (ID: 2438): Initial start point, initial values, no end point. Do not run.

Scenario Start Point(s):

enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
Busy	2054	The terminating party is busy	boolean	true
TLactive	2057	TeenLine is active at this time	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true

Scenario End Point(s):

busy (ID: 933)

Group FI_OCS_TL (ID: 2445)

Scenario Scenario2732 (ID: 2732)

Scenario Start Point(s):

req (ID: 30): A call request to a terminating party is done
enterPIN (ID: 1478)

Initialization(s):

Variable Name	ID	Description	Type	Initial Value
SubOCS	2059	The originator is subscribed to OCS	boolean	true
SubTL	2060	The originator is subscribed to TeenLine	boolean	true
Busy	2054	The terminating party is busy	boolean	false
SubCND	2058	The terminator is subscribed to CND	boolean	false
OnOCSlist	2055	The terminating party is on the OCS filtering list	boolean	false
TLactive	2057	TeenLine is active at this time	boolean	true
PINvalid	2056	The TeenLine PIN provided is valid	boolean	true

Scenario End Point(s):

ring (ID: 32): A call request is announced

ringing (ID: 953)