

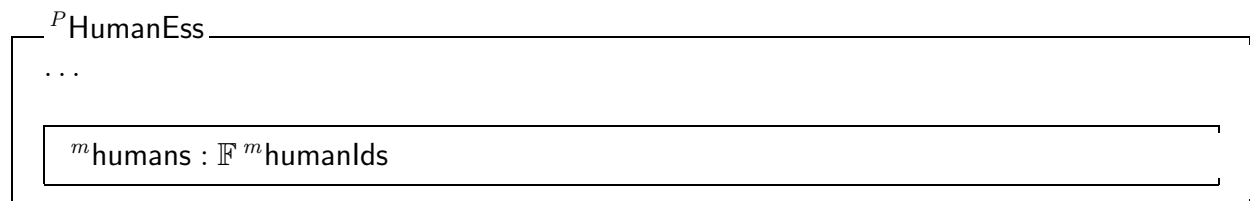
Excerpt From Case Study On a Telephone Switching System

2 feature ^FUserSpace

2.1.1 section ^PHumanEss [Humans]

parents

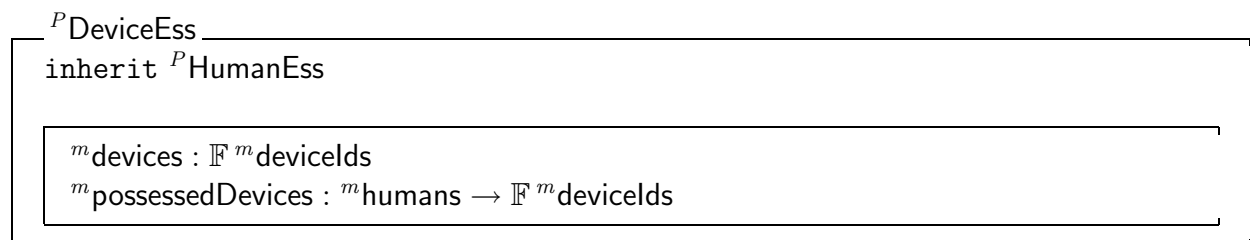
...



2.1.2 section ^PDeviceEss [Telephone Devices]

parents ^PHumanEss

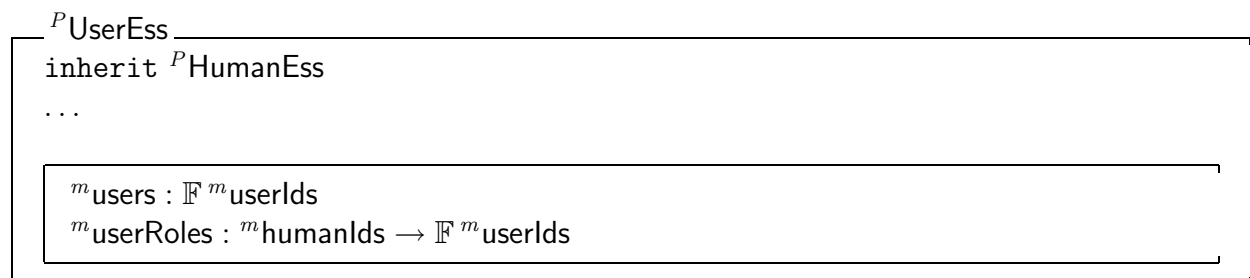
...



2.1.3 section ^PUserEss [User Roles]

parents ^PHumanEss

...



...

2.2.3 default_section P **DevAssocNoRem** [Telephone Device Associations neither Added nor Removed]

P DevAssocNoRem _____
inherit P HumanEss, P DeviceEss, ...

$\forall h : {}^m\text{humans} \bullet$
 ${}^m\text{possessedDevices}(h) = {}^p\text{initialPossessedDevices}(h)$

2.2.4 collect_section s **UserSpaceFeature** [Collection of all the Requirements]

P UserSpaceFeatureEnv _____
inherit P HumanEss, P DeviceEss, P UserEss
default_properties ..., P DevAssocNoRem, ...

...

3 feature ^FBasicConnection

...

3.2.5 section ^PConEssUserAvailable [User Available for Connection]

```
PConEssUserAvailable _____  
inherit ...  
...
```

...

3.6.7 default_section ^PUserResSimple [Simple User Resources]

```
PUserResSimple _____  
inherit ...  
...
```

...

3.9.2 collect_section ^sBasicConnectionFeature [Collection of all the Requirements]

```
PBasicConnectionFeatureSys _____  
inherit ... PConEssUserAvailable ...  
default_properties ... PUserResSimple
```

...

8 familymember ^SSpecificationB

features

^FUserSpace

^FBasicConnection

^FVoiceChannel

^FScreeningBase

^FBlackListOfDevices

...

6 feature ^FScreeningBase

6.2.3 section ^PConScreenEss [Connection Screening]

```

PConScreenEss
...

```

remove ^PUserResSimple

6.3.1 default_section ^PUserResScreen [User Resources with Screening]

```

PUserResScreen
inherit PConScreenEss
...

```

...

6.3.2 default_section ^PConNoScreen [No Connection Screening Yet]

```

PConNoScreen
inherit PConScreenEss

  (
     $\forall u, v : {}^m\text{users} \bullet$ 
    ( CconnectionScreen( $u, v$ ) = MconnectionScreenOk )
  )

```

6.4.1 collect_section ^sScreeningBaseFeature [Collection of all the Requirements]

```

PScreeningBaseFeatureSys
inherit PConScreenEss
default_properties PUserResScreen ...

```

...

9 feature ^FBlackListOfUsers

...

remove ^PConNoScreen

9.3.2 default_section ^PBlackListUsrOnly [User Black List is the only Screening Feature]

```
PBlackListUsrOnly _____  
inherit ..., PConScreenEss  
  
⎣  
   $\forall u, v : {}^m\text{users} \bullet$   
     $(({}^C\text{connectionScreen}(u, v) = {}^M\text{connectionScreenBlock})$   
     $\Leftrightarrow ((u, v) \in {}^C\text{blackListUsr}))$   
⎣
```

...

9.4.1 collect_section ^SBlackListOfUsersFeature [Collection of all the Requirements]

```
PBlackListOfUsersFeatureSys _____  
inherit ...  
default_properties PBlackListUsrOnly, ...
```

10 feature ^FFollowHumanConnectionForwarding

...

remove ^PDevAssocNoRem

...

11 familymember ^SSpecificationC

```
features  
  FUserSpace,  
  FBasicConnection,  
  FVoiceChannel,  
  FScreeningBase,  
  FBlackListOfUsers,  
  FFollowHumanConnectionForwarding
```