

Definition of a Hierarchy of families

The proposal is a modification of the *Family_t* node. We propose to allow a list of *FamilyName_t* nodes as children of the *Family_t*. A hierarchy of families is then possible, a *Family* can be defined as a *Parent* (or a *Child*) of another *Family*. For example, one would define *Wings* as parent of *Left Wing* and *Right Wing*. Such a simple extension could be used to mimic some CAD related hierarchy.

The name *FamilyParent* is reserved and refers to the *Parent Family* of the current *Family_t* node.

```
Family_t :=
{
  List( Descriptor_t Descriptor1 ... DescriptorN ) ;           (o)
  FamilyBC_t FamilyBC ;                                       (o)
  List( GeometryReference_t
        GeometryReferencel ... GeometryReferenceN ) ;       (o)
  RotatingCoordinates_t RotatingCoordinates ;                (o)

  List( FamilyName_t FamilyName1 ... FamilyNameN ) ;         (o)

  List( UserDefinedData_t UserDefinedData1 ... UserDefinedDataN ) ; (o)
  int Ordinal ;                                              (o)
} ;
```

Remarks:

1- It is strongly recommended that the Family hierarchy should be an acyclic graph. However, it is the responsibility of the application to manage the hierarchy parse and to check possible loops.