Here is the hierarchical tree representation of the instantiated security case for Instant Messaging (IM) software:

```plaintext

- G1: The IM software is acceptably secure in the communication system

- C1: Definition and description of the IM software

- C2: Definition and description of the communication system

- C3: Definition of acceptably secure

- S1: Argument that software assets are under protection

- J1: Protection of software assets supports that the software is acceptably secure

- G2: All identified IM software critical assets are protected

- S2: Respective arguments of IM software critical assets

- C4: List of IM software critical assets

- J2: Relationship between assets is clear and can be argued separately

- G3: IM software user data is protected

- S3: Argument of the type which the software critical asset belongs to

- C5: List of software critical asset types in PEDD

- J3: Types of software assets are according to PEDD

- G4: User data which belongs to privacy data type is protected

- G3: IM software message history is protected

- S3: Argument of the type which the software critical asset belongs to

- C5: List of software critical asset types in PEDD

- J3: Types of software assets are according to PEDD

- G4: Message history which belongs to confidentiality data type is protected

- G3: IM software contact list is protected

- S3: Argument of the type which the software critical asset belongs to

- C5: List of software critical asset types in PEDD

- J3: Types of software assets are according to PEDD

- G4: Contact list which belongs to integrity data type is protected

- G3: IM software media files are protected

- S3: Argument of the type which the software critical asset belongs to

- C5: List of software critical asset types in PEDD

- J3: Types of software assets are according to PEDD

- G4: Media files which belong to availability data type are protected

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This hierarchical tree structure uses dashes to denote different levels, reflecting the depth of each element in the argument.