Based on the details provided, we will instantiate the security case pattern for Instant Messaging (IM) software. I will replace the placeholders with specific information related to IM software and organize them in a hierarchical tree format.

### Instantiated Security Case for Instant Messaging (IM) Software:

- \*\*Goal (G1, "IM software is acceptably secure in corporate environment")\*\*

- \*\*Context (C1, "Definition and description of IM software")\*\*

- \*\*Context (C2, "Definition and description of corporate environment")\*\*

- \*\*Context (C3, "Definition of acceptably secure")\*\*

- \*\*Strategy (S1, "Argument that IM software assets are under protection")\*\*

- \*\*Justification (J1, "Protection of IM software assets supports that software is acceptably secure")\*\*

- \*\*Goal (G2, "All identified IM software critical assets are protected")\*\*

- \*\*Context (C4, "List of IM software critical assets")\*\*

- \*\*Strategy (S2, "Respective arguments of IM software critical assets")\*\*

- \*\*Justification (J2, "Relationship between assets is clear and can be argued separately")\*\*

- \*\*Goal (G3, "IM software critical asset is protected")\*\*

- \*\*Strategy (S3, "Argument of the type to which the IM software critical asset belongs")\*\*

- \*\*Context (C5, "List of IM software critical asset types in PEDD (Protected, Encrypted, Distributed, Denied)")\*\*

- \*\*Justification (J3, "Types of IM software assets are according to PEDD")\*\*

- \*\*Goal (G4, "IM software critical asset which belongs to communication is protected") (occurs 4 times for each asset type)\*\*

This structure provides a clear delineation of the top-level goal (G1) supported by strategies, sub-goals, and further substantiated by contexts and justifications. This structured approach ensures all parts of the assurance case are addressed systematically. Each subordinate goal (G2, G3, G4) drills down into specifics of what it means for IM software assets to be protected within a corporate environment. The strategies (S1, S2, S3) connect the goals and guide the explanation of how the goals are supported or achieved. The hierarchical structure reflects the dependencies and relationships between these GSN elements.