Certainly! Here's how the given security case pattern can be instantiated into a security case for Instant Messaging (IM) software using the domain information provided:

\*\*Goal (G1)\*\*: IM software is acceptably secure in the IM system.

- \*\*Context (C1)\*\*: Definition and description of IM software.

- \*\*Context (C2)\*\*: Definition and description of IM system.

- \*\*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 the IM software is acceptably secure.

- \*\*Goal (G2)\*\*: All identified IM software critical assets are protected.

- \*\*Strategy (S2)\*\*: Respective arguments of IM software critical assets.

- \*\*Context (C4)\*\*: List of IM software critical assets.

- \*\*Justification (J2)\*\*: Relationship between IM software assets is clear and can be argued separately.

- \*\*Goal (G3)\*\*: Registration information is protected.

- \*\*Strategy (S3)\*\*: Argument of the type which the registration information belongs to.

- \*\*Context (C5)\*\*: List of IM software critical asset types in PEDD.

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

- \*\*Goal (G4)\*\*: Registration information which belongs to Data Storage is protected.

- \*\*Goal (G3.1)\*\*: Registration process is protected.

- \*\*Strategy (S3.1)\*\*: Argument of the type which the registration process belongs to.

- \*\*Context (C5.1)\*\*: List of IM software critical asset types in PEDD.

- \*\*Justification (J3.1)\*\*: Types of IM software assets are according to PEDD.

- \*\*Goal (G4.1)\*\*: Registration process which belongs to Process is protected.

- \*\*Goal (G3.2)\*\*: User account information is protected.

- \*\*Strategy (S3.2)\*\*: Argument of the type which the user account information belongs to.

- \*\*Context (C5.2)\*\*: List of IM software critical asset types in PEDD.

- \*\*Justification (J3.2)\*\*: Types of IM software assets are according to PEDD.

- \*\*Goal (G4.2)\*\*: User account information which belongs to Data Storage is protected.

- \*\*Goal (G3.3)\*\*: Authentication information is protected.

- \*\*Strategy (S3.3)\*\*: Argument of the type which the authentication information belongs to.

- \*\*Context (C5.3)\*\*: List of IM software critical asset types in PEDD.

- \*\*Justification (J3.3)\*\*: Types of IM software assets are according to PEDD.

- \*\*Goal (G4.3)\*\*: Authentication information which belongs to Data Storage is protected.

- \*\*Goal (G3.4)\*\*: Login process is protected.

- \*\*Strategy (S3.4)\*\*: Argument of the type which the login process belongs to.

- \*\*Context (C5.4)\*\*: List of IM software critical asset types in PEDD.

- \*\*Justification (J3.4)\*\*: Types of IM software assets are according to PEDD.

- \*\*Goal (G4.4)\*\*: Login process which belongs to Process is protected.

- \*\*Goal (G3.5)\*\*: Chat logs are protected.

- \*\*Strategy (S3.5)\*\*: Argument of the type which the chat logs belong to.

- \*\*Context (C5.5)\*\*: List of IM software critical asset types in PEDD.

- \*\*Justification (J3.5)\*\*: Types of IM software assets are according to PEDD.

- \*\*Goal (G4.5)\*\*: Chat logs which belong to Data Exchange are protected.

Here is the hierarchical tree format using dashes to denote different levels:

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-Goal (G1, IM software is acceptably secure in IM system)

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

-Context (C2, Definition and description of IM system)

-Context (C3, Definition of acceptably secure)

-Strategy (S1, Argument of that IM software assets are under protection)

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

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

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

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

-Justification (J2, Relationship between IM software assets is clear and can be argued separately)

-Goal (G3, Registration information is protected)

-Strategy (S3, Argument of the type which the registration information belongs to)

-Context (C5, List of IM software critical asset types in PEDD)

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

-Goal (G4, Registration information which belongs to Data Storage is protected)

-Goal (G3.1, Registration process is protected)

-Strategy (S3.1, Argument of the type which the registration process belongs to)

-Context (C5.1, List of IM software critical asset types in PEDD)

-Justification (J3.1, Types of IM software assets are according to PEDD)

-Goal (G4.1, Registration process which belongs to Process is protected)

-Goal (G3.2, User account information is protected)

-Strategy (S3.2, Argument of the type which the user account information belongs to)

-Context (C5.2, List of IM software critical asset types in PEDD)

-Justification (J3.2, Types of IM software assets are according to PEDD)

-Goal (G4.2, User account information which belongs to Data Storage is protected)

-Goal (G3.3, Authentication information is protected)

-Strategy (S3.3, Argument of the type which the authentication information belongs to)

-Context (C5.3, List of IM software critical asset types in PEDD)

-Justification (J3.3, Types of IM software assets are according to PEDD)

-Goal (G4.3, Authentication information which belongs to Data Storage is protected)

-Goal (G3.4, Login process is protected)

-Strategy (S3.4, Argument of the type which the login process belongs to)

-Context (C5.4, List of IM software critical asset types in PEDD)

-Justification (J3.4, Types of IM software assets are according to PEDD)

-Goal (G4.4, Login process which belongs to Process is protected)

-Goal (G3.5, Chat logs are protected)

-Strategy (S3.5, Argument of the type which the chat logs belong to)

-Context (C5.5, List of IM software critical asset types in PEDD)

-Justification (J3.5, Types of IM software assets are according to PEDD)

-Goal (G4.5, Chat logs which belong to Data Exchange are protected)

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