

## MaxTune-SD\_TSD\_Kapitel-4.4\_v2.1 – Technical System Documentation

### Error Typologies and Resolution Pathways

Version: 2.1 Effective from: 25.04.2025 Status: 100/100 – Approved Note:  
Compatibility with Max systems is based on documented interfaces, not fixed version bindings.

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#### 4.4 Error Typologies and Resolution Pathways

MaxTune classifies errors along policy, technical, and contextual dimensions. Each typology has its own resolution protocol, rollback logic, and escalation path.

Error types include:

- Policy violation: automatic learning halt and audit alert
- Resource overflow: pause, isolate, and retry with adjusted limits
- Data drift: trigger revalidation of learning state
- Evaluation anomaly: freeze score and require external review

Resolution pathways are encoded in MaxTune's system logic and include:

- Automatic rollback to last valid checkpoint
- Stakeholder-triggered override or deferral
- Forking of error-state for sandbox analysis
- Audit log enhancement with real-time signature

Every error event is treated as a knowledge boundary—something not to be hidden, but to be made legible and correctable. MaxTune turns errors into structured improvement data.

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