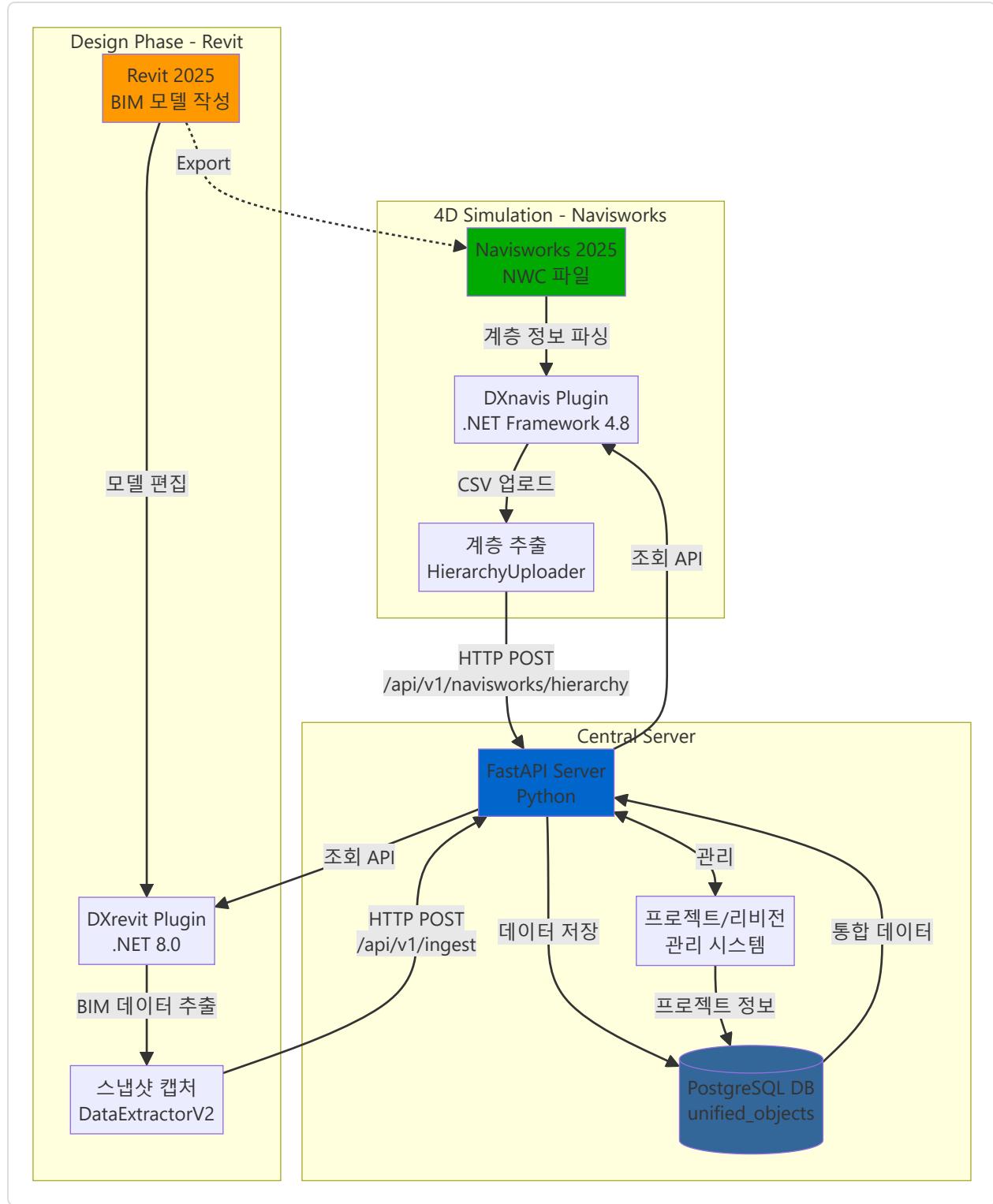


BIM-DXPlatform 시스템 플로우

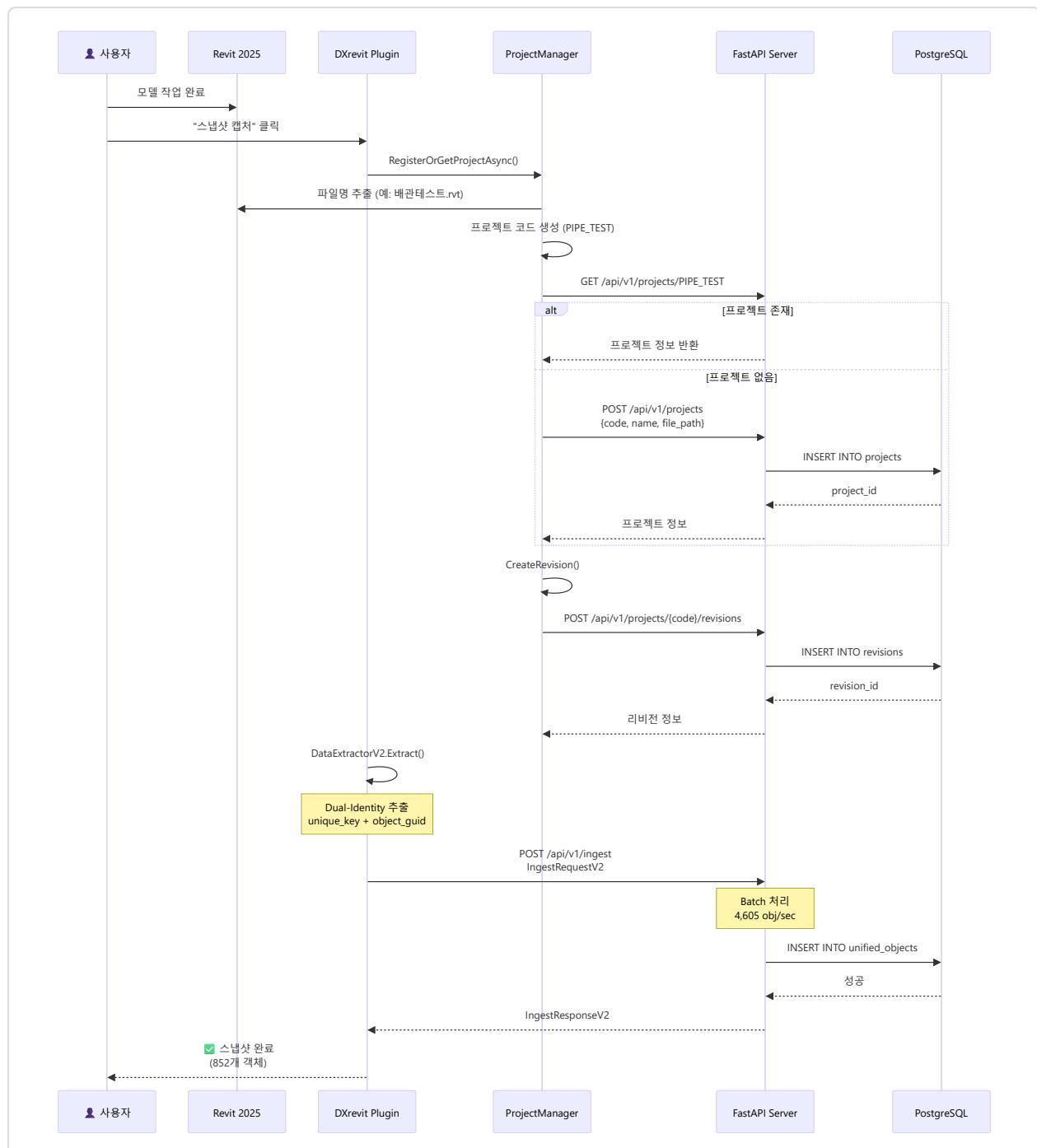


전체 시스템 아키텍처

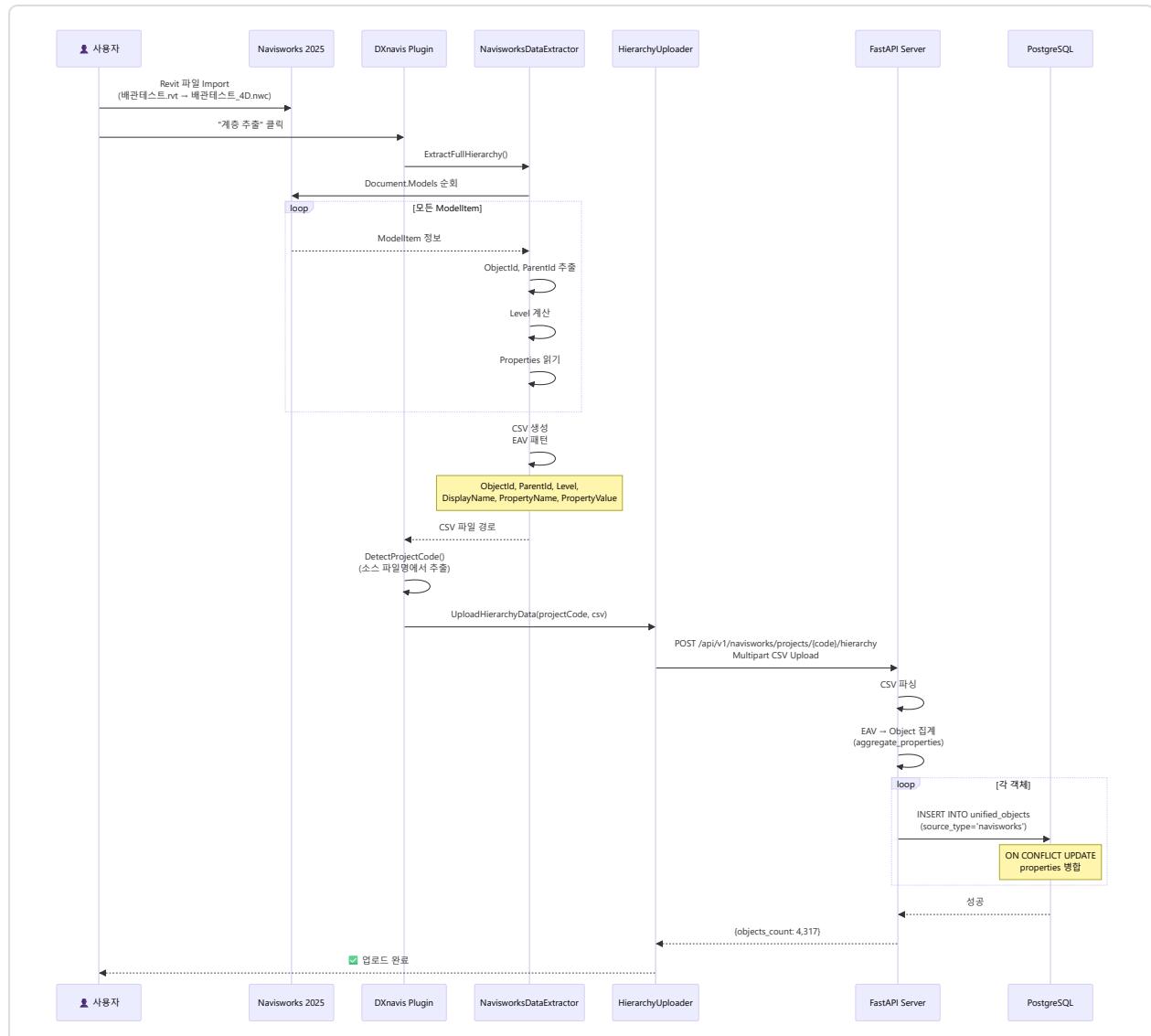


주요 워크플로우

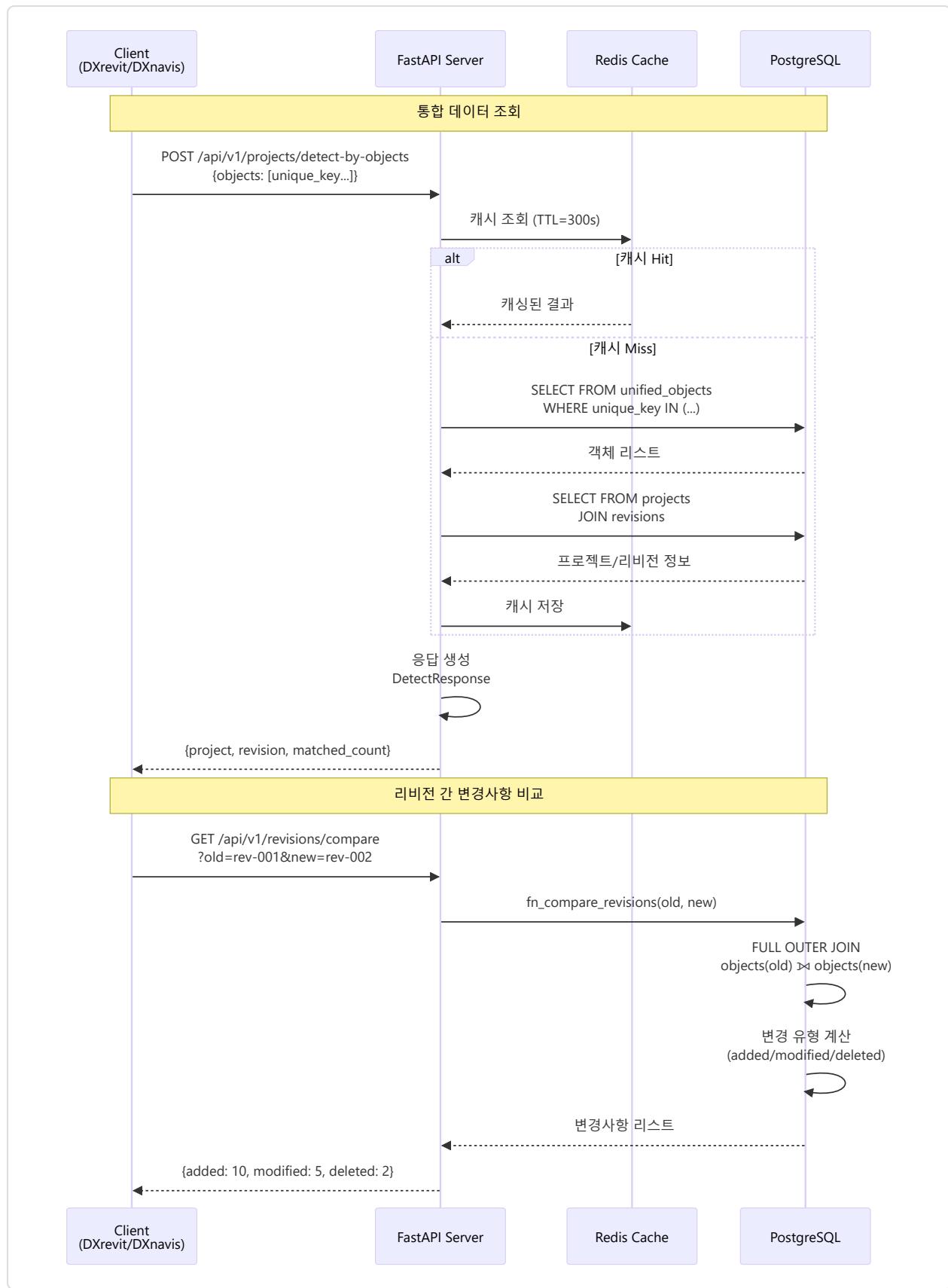
1 Revit 데이터 추출 플로우



2 Navisworks 계층 데이터 업로드 플로우

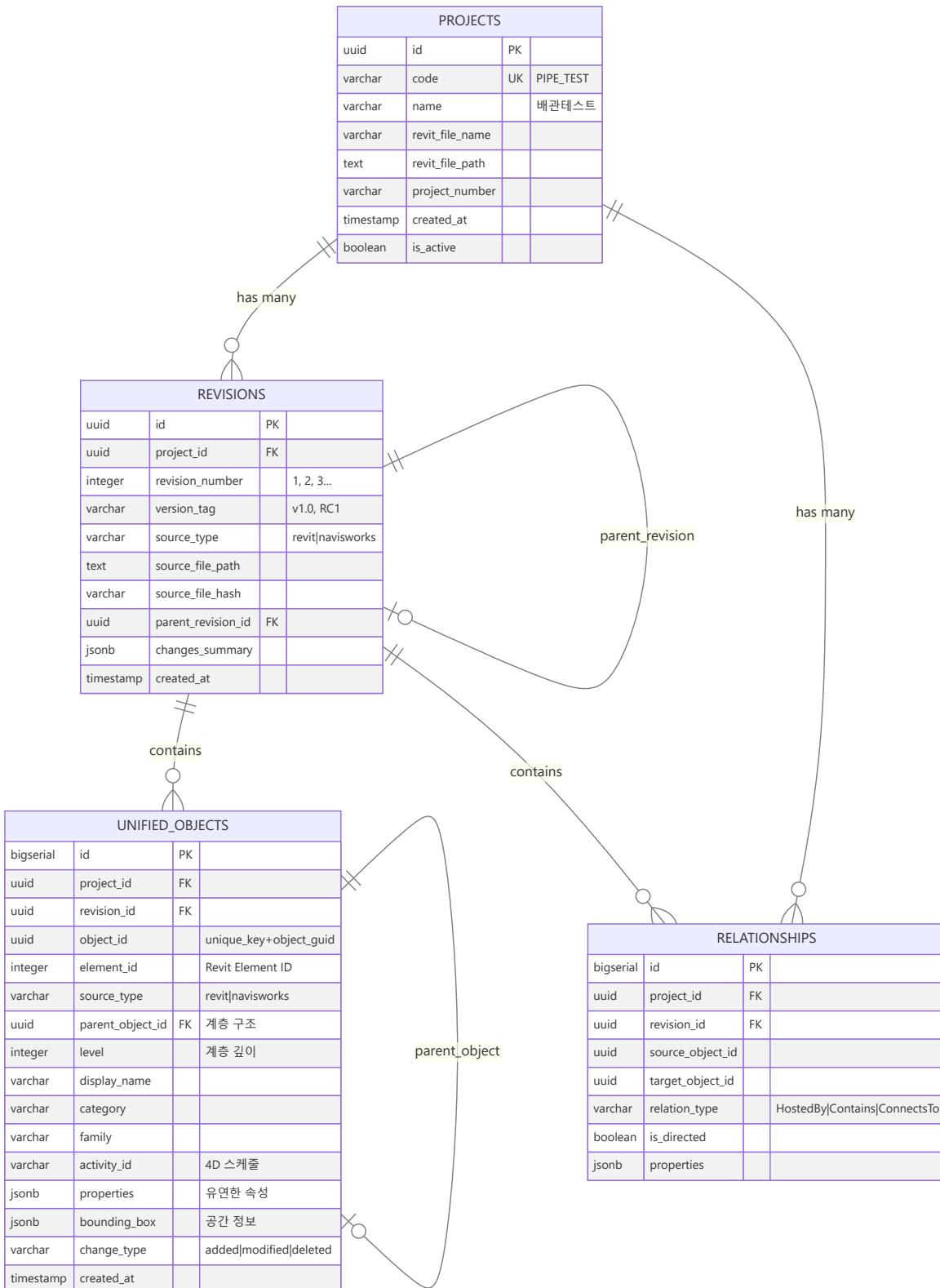


3 데이터 통합 및 조회 플로우



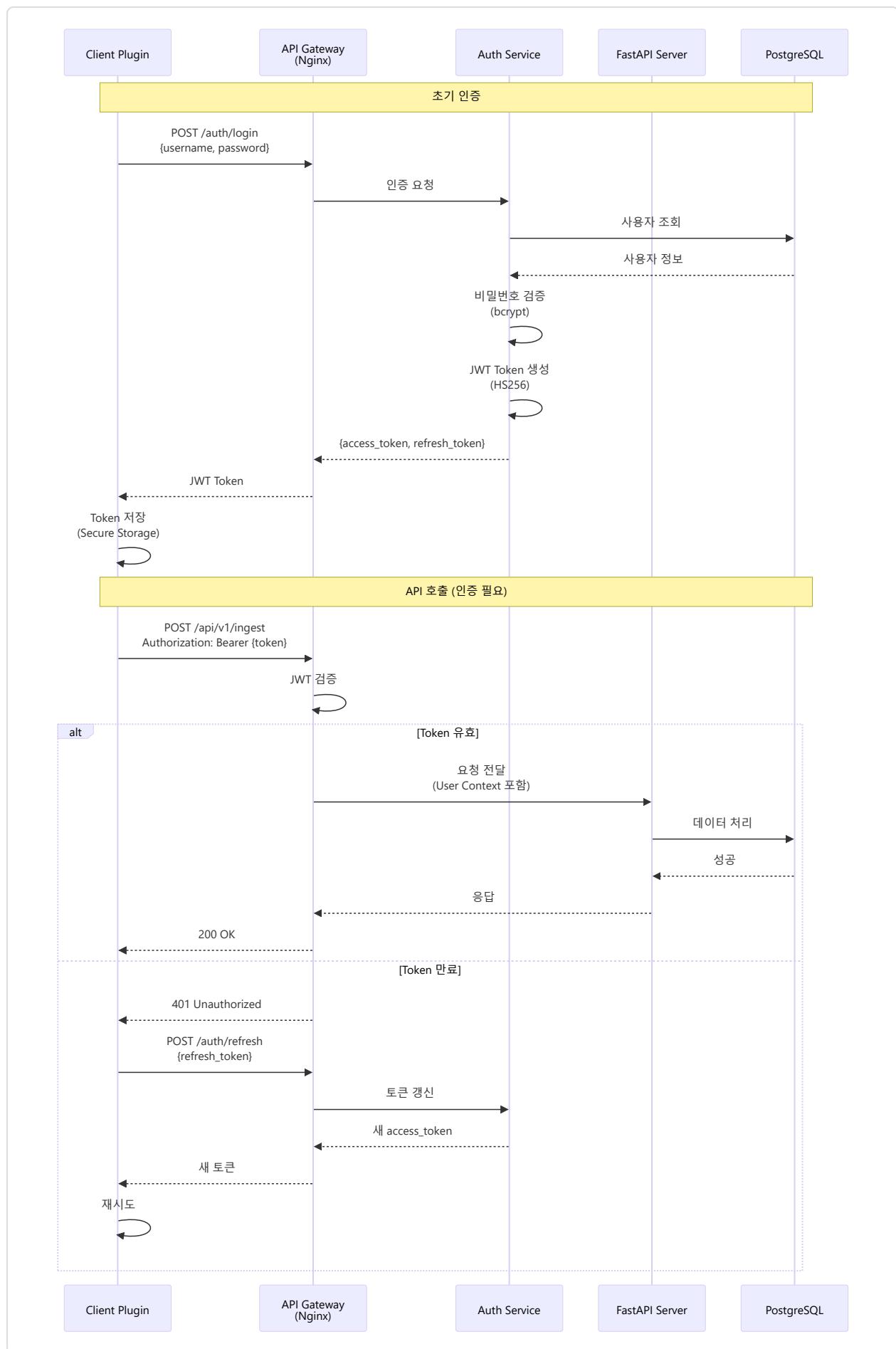


데이터베이스 스키마 플로우

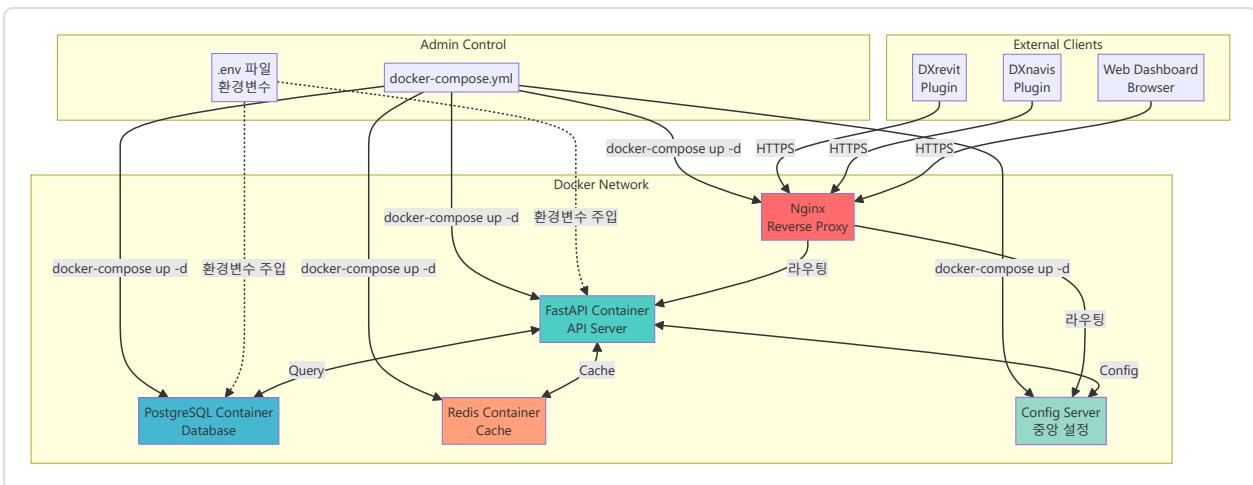




인증 및 보안 플로우 (계획)

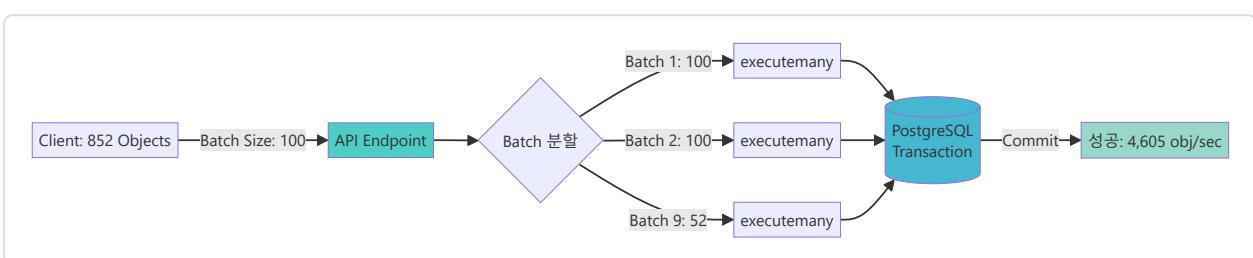


Docker 배포 플로우 (권장 아키텍처)

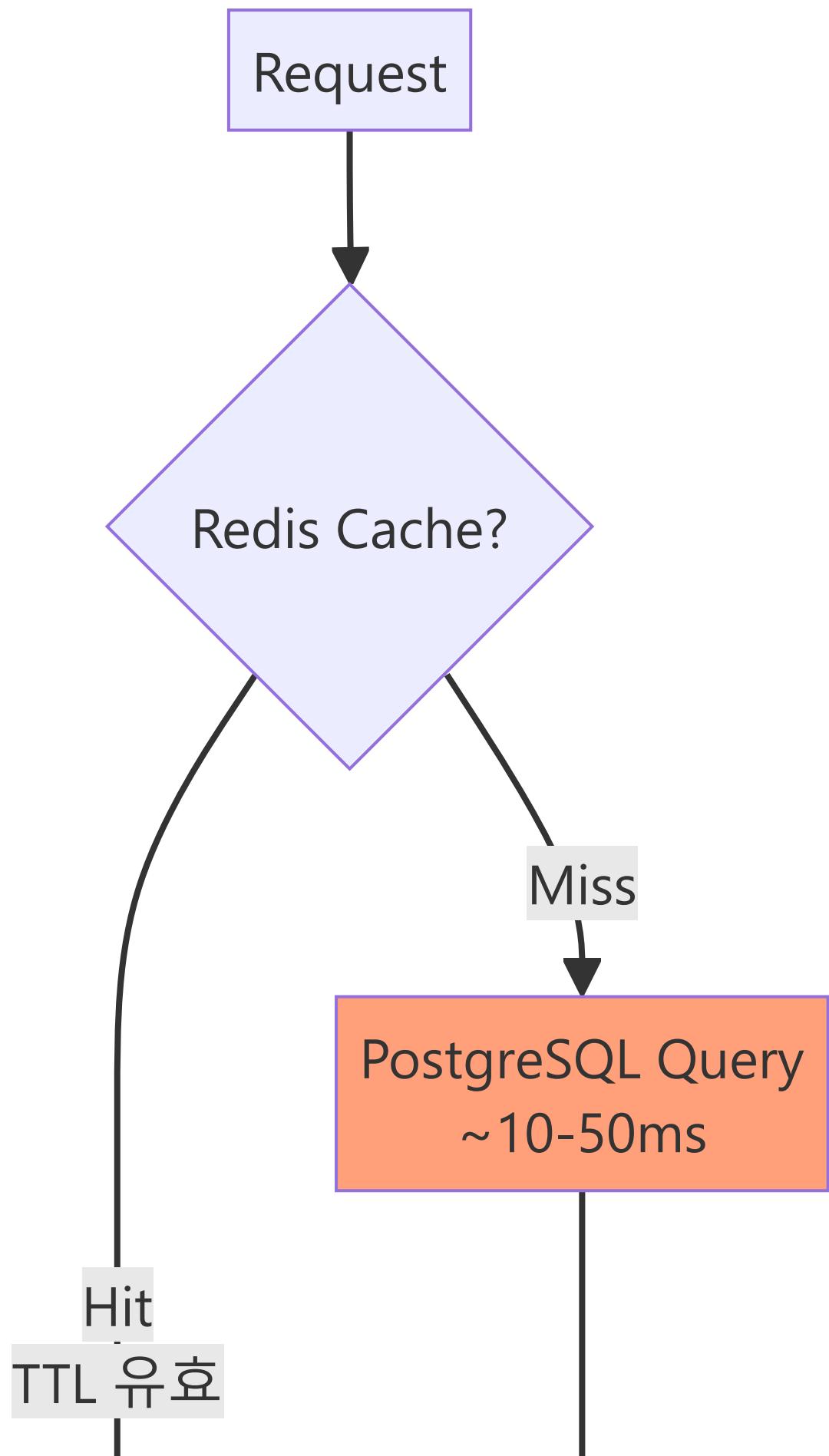


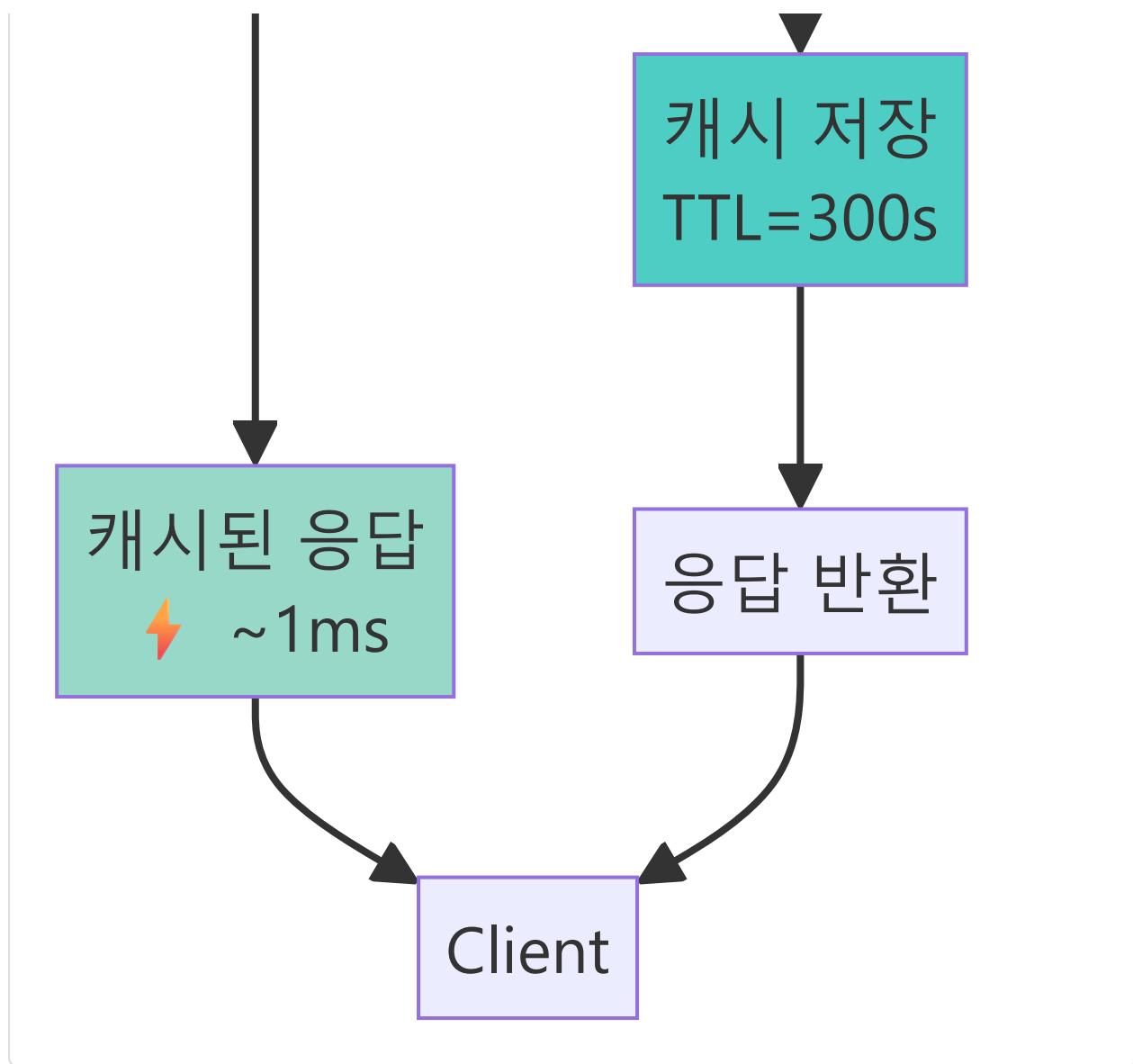
성능 최적화 플로우

Batch Processing (Ingest API)

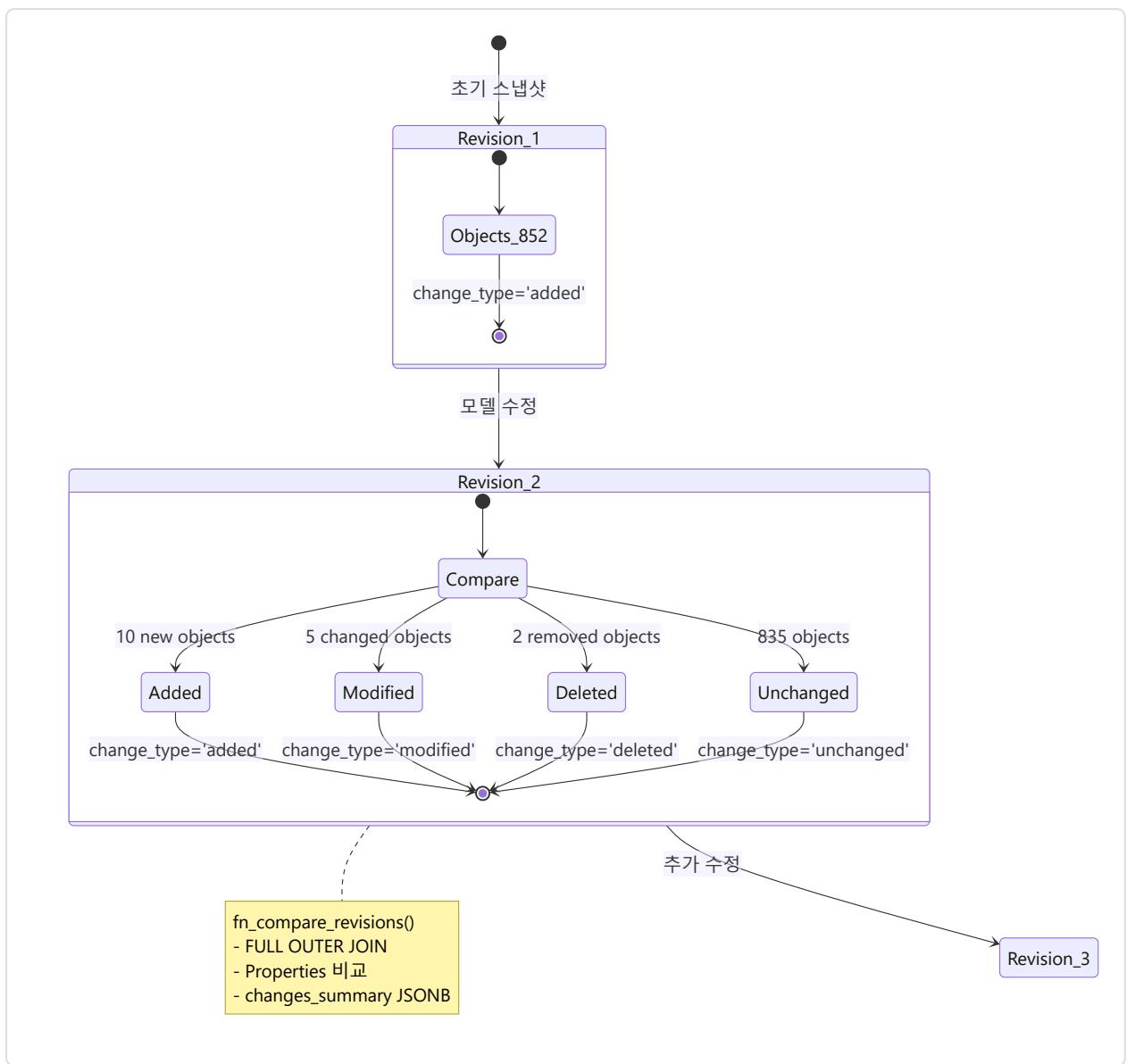


Caching Strategy





변경 추적 플로우





요약

핵심 플로우

1. **Revit → FastAPI**: BIM 데이터 추출 및 전송
2. **Navisworks → FastAPI**: 계층 정보 업로드
3. **FastAPI → PostgreSQL**: 통합 데이터 저장
4. **리비전 추적**: 변경사항 자동 감지

성능 지표

- **Ingest**: 4,605 객체/초
- **Detection**: p95 = 3.28ms
- **Caching**: TTL 300초 (5분)

보안 계층

- HTTPS 암호화 통신
- JWT 토큰 인증 (계획)
- Docker Secrets 관리 (계획)