

# Software Design Specification for Network Printing System

**Project Team**

**T5 Team**

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**2015-11-10**

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**Team Information**

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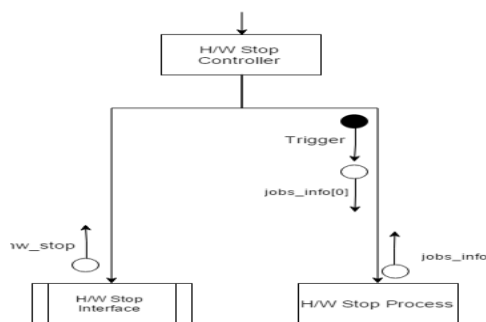
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## 1 Introduction

### 1.1 Purpose

본 문서는 Network Printing System을 구현하는 가상의 소프트웨어 시스템의 요구사항을 Structured Analysis 기법을 사용하여 분석한 내용을 담고 있다. 이 문서를 통하여 Network Printer System에 필요한 요구사항들 간의 관계를 명확히 표현하고 실제 구현의 토대를 구축한다.

### 1.2 Scope

#### 1.2.1 Developer Team

Class A – T5 Team

#### 1.2.2 Restrictions

하드웨어로 구동되는 모든 사항은 일종의 에뮬레이터(SW 혹은 Console 명령어)를 구현하여 가상으로 구현한다.

### 1.3 Definition, acronyms, and abbreviations

SW: Software

HW: Hardware

NPS: Network Printing System

인쇄요청: 사용자는 프린터에게 자신이 인쇄하고자 하는 파일을 전송한다.

충전: 관리자는 프린터의 자원(잉크, 종이)이 모자라는 경우, 자원 공급을 실행할 수 있다.

사용자 등록/삭제: 관리자는 사용자를 NPS에 등록하거나 삭제할 수 있다.

사용자 인증: NPS는 인쇄 요청을 보내는 사용자가 사용자 데이터베이스에 등록되어 있는지 확인한다.

프린터 출력: 사용자가 전송한 파일을 특정 형태로 인쇄하는 작업이다

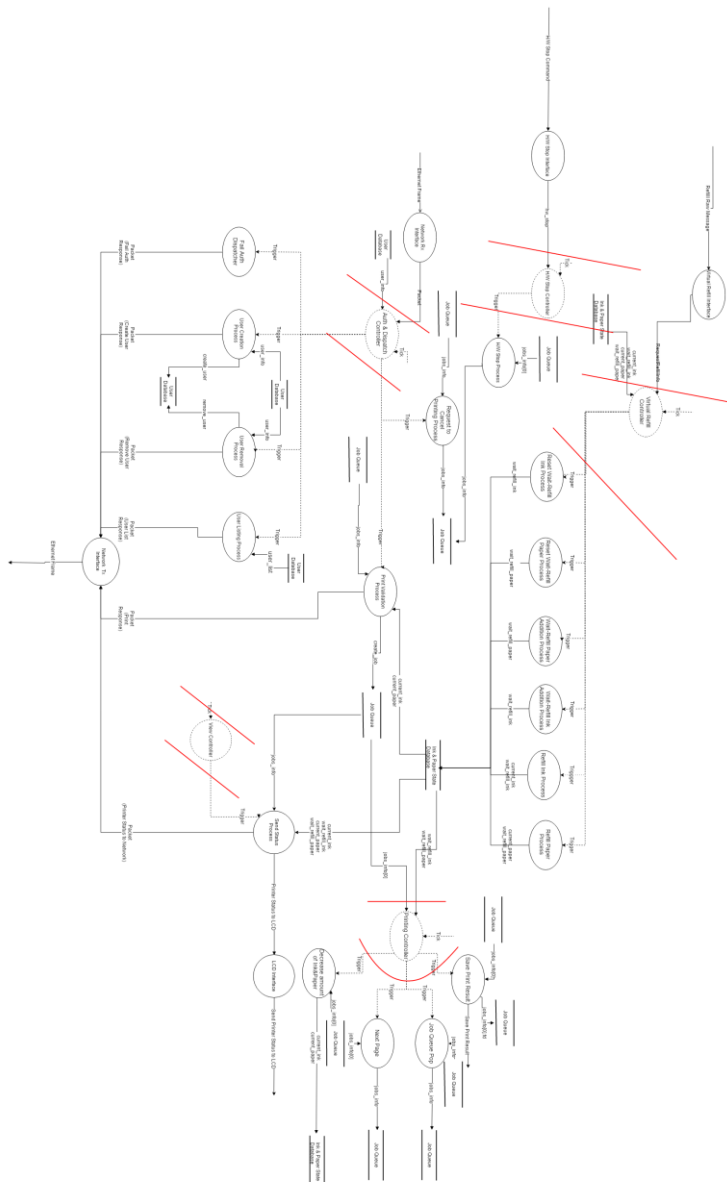
잔량 확인: 사용자는 현재 프린터의 자원 상태(용지/잉크)

2 References

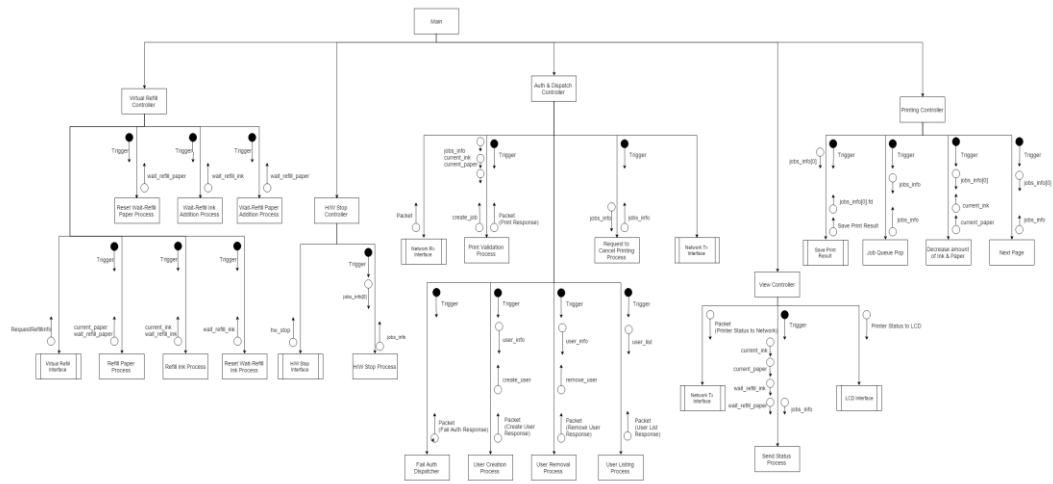
<http://dslab.konkuk.ac.kr>

3 Structured Design

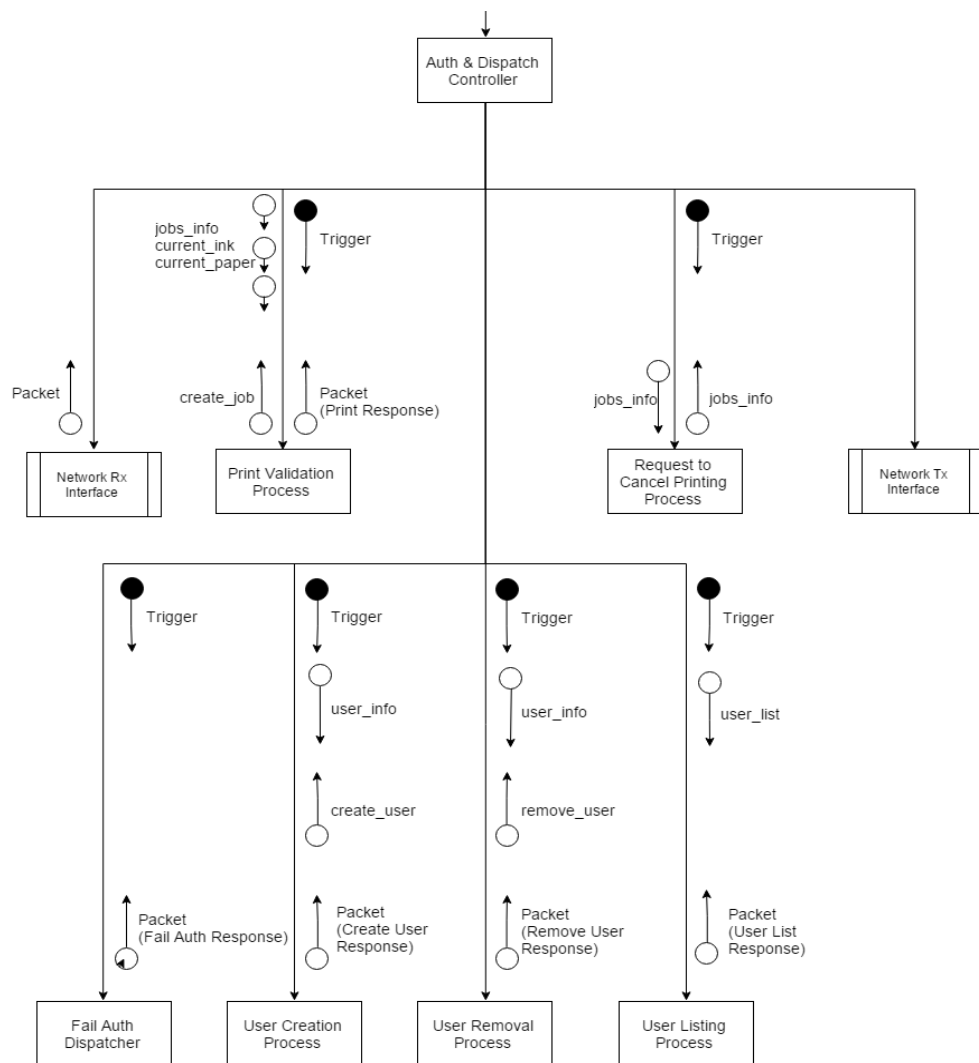
3.1 Transform Analysis for Structured Charts



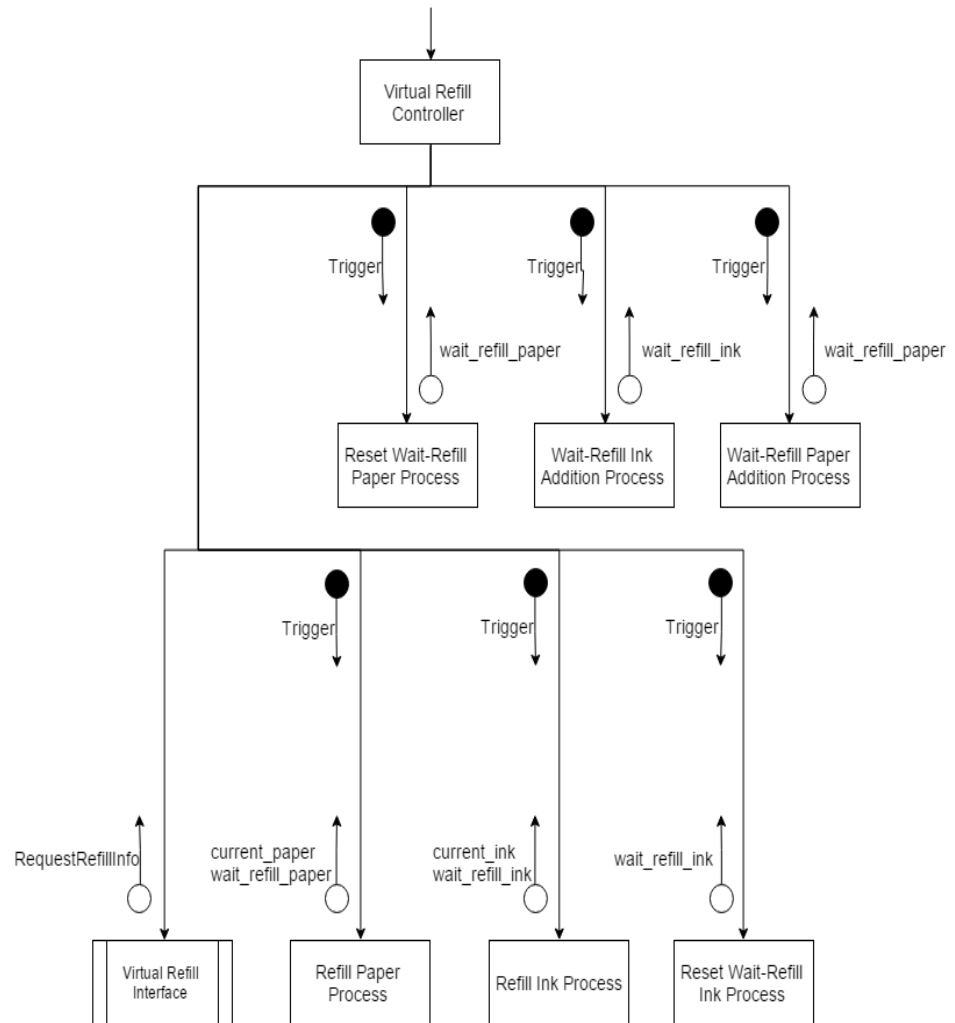
### 3.2 Structured Charts (Basic)



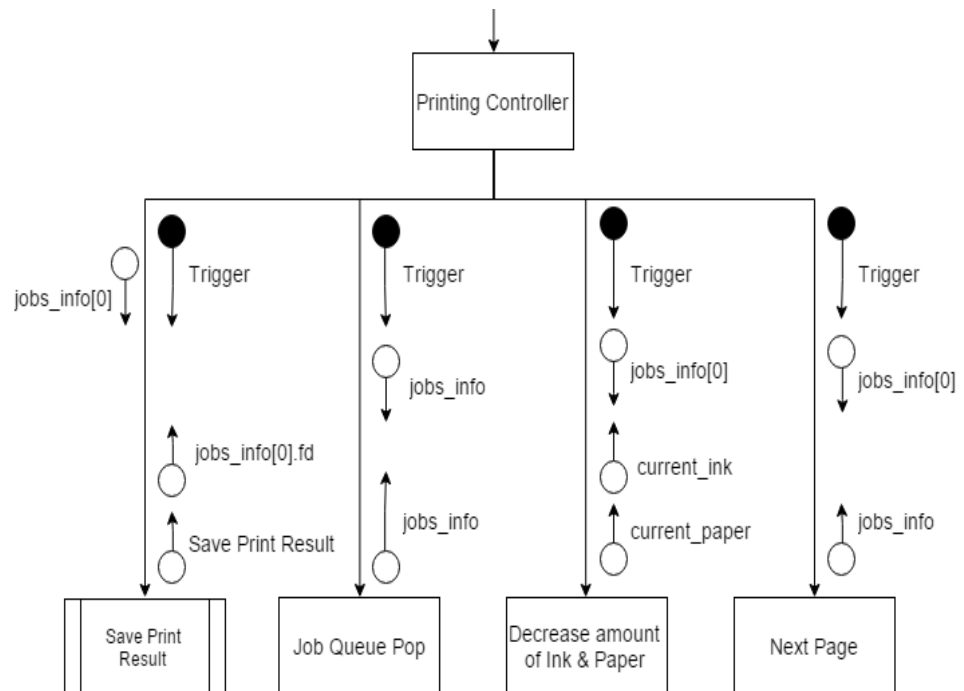
#### 3.2.1 Structured Charts (Basic) - Auth & Dispatch Controller



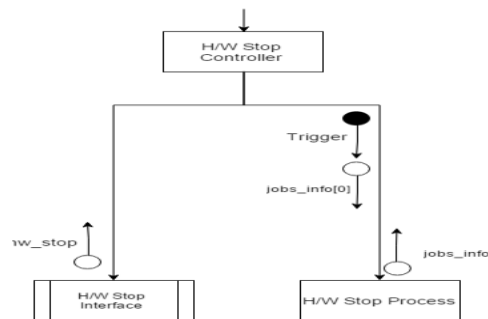
3.2.2 Structured Charts (Basic) - Virtual Refill Controller



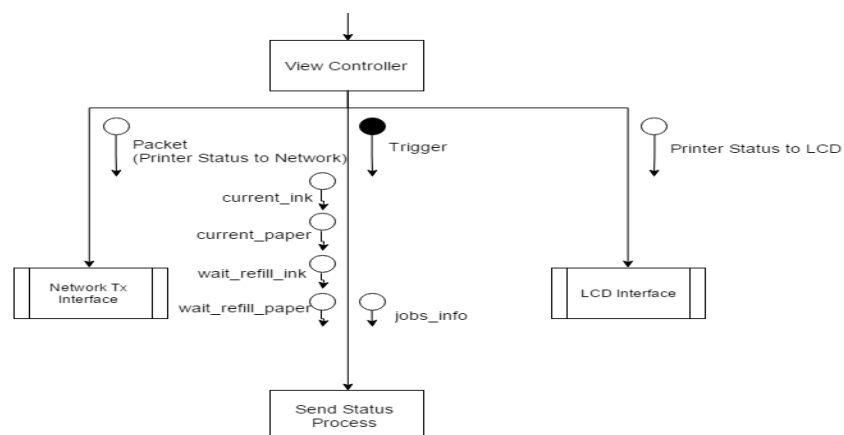
### 3.2.3 Structured Charts (Basic) - Printing Controller



### 3.2.4 Structured Charts (Basic) – H/W Stop Controller

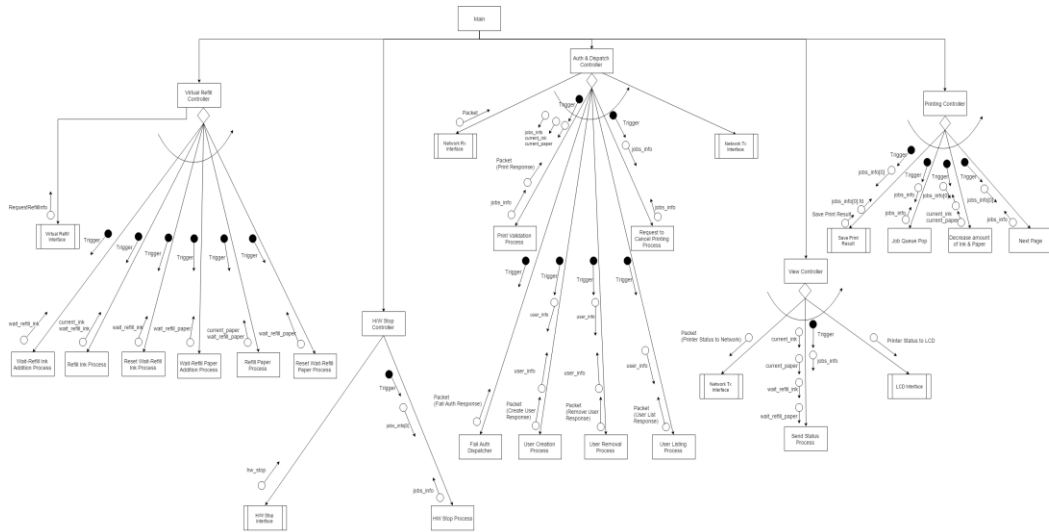


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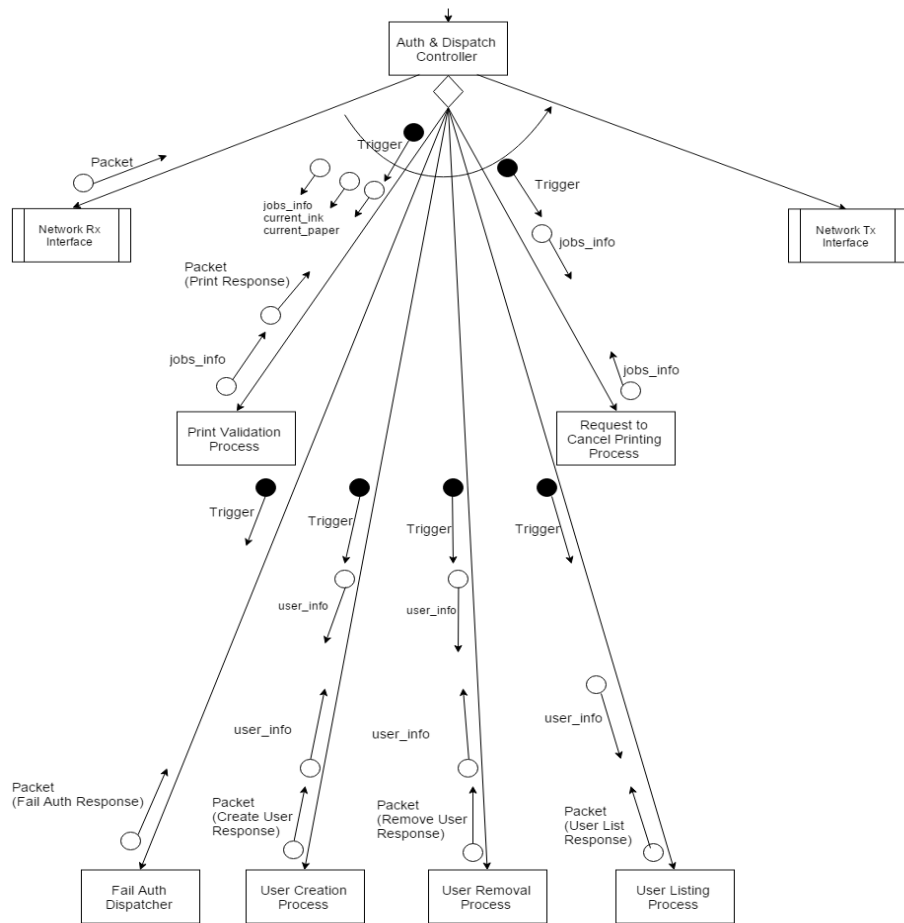




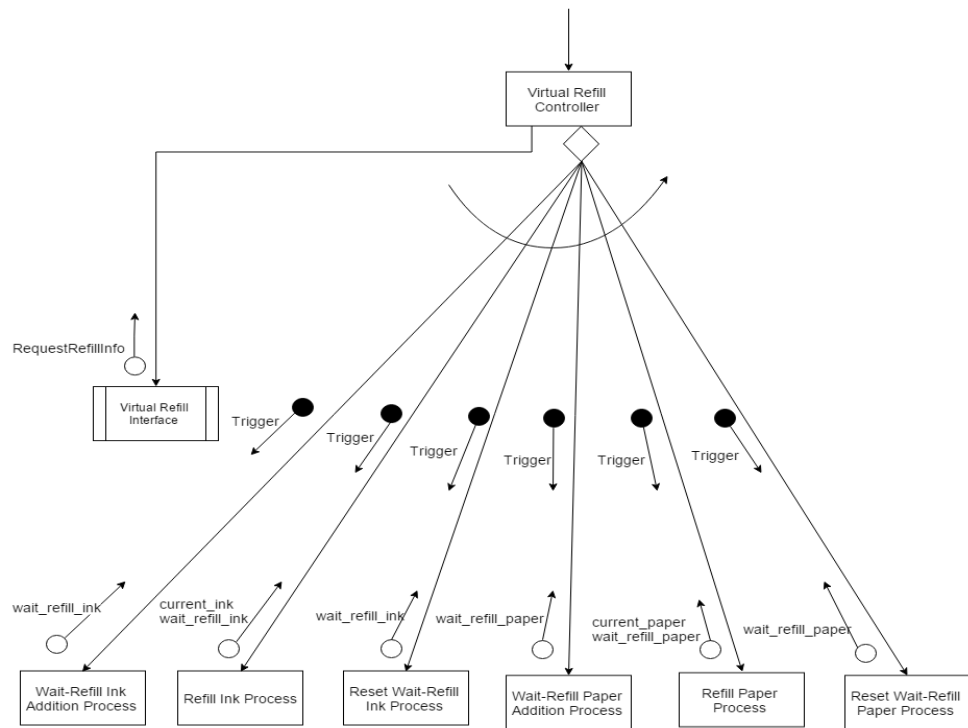
### 3.3 Structured Charts (Advanced)



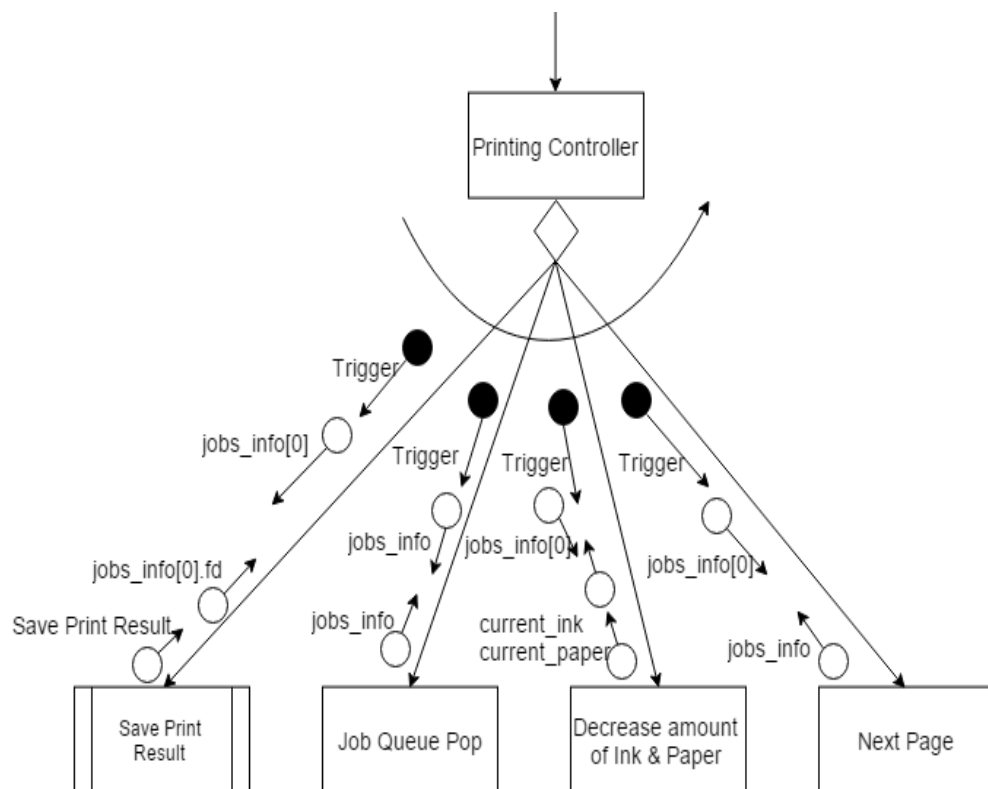
#### 3.3.1 Structured Charts (Advanced) - Auth & Dispatch Controller



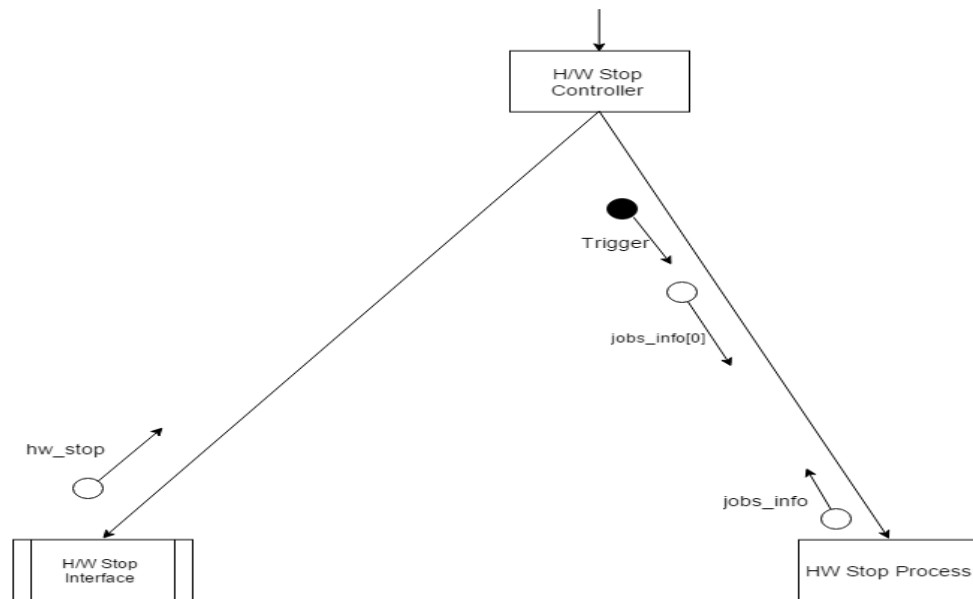
### 3.3.2 Structured Charts (Advanced) - Virtual Refill Controller



### 3.3.3 Structured Charts (Advanced) - Printing Controller



### 3.3.4 Structured Charts (Advanced) – H/W Stop Controller



### 3.3.5 Structured Charts (Advanced) - View Controller

