

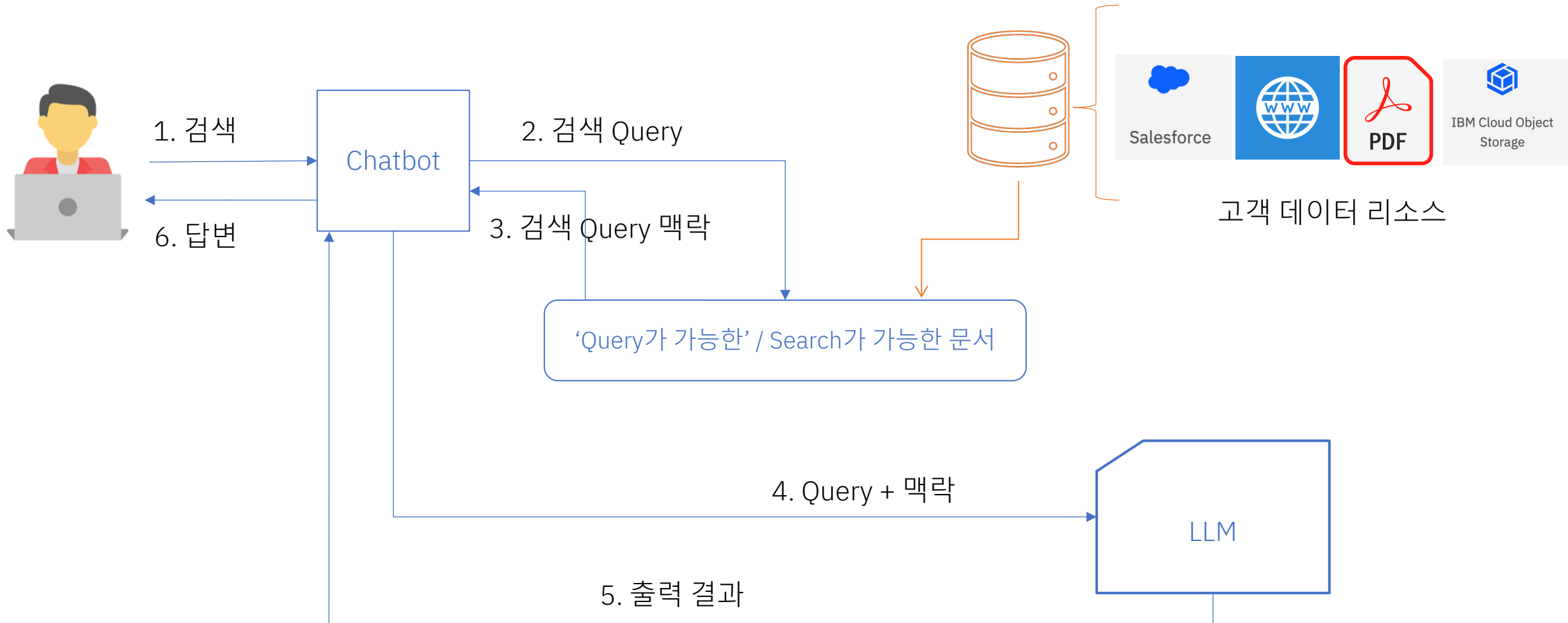
watsonx.ai, watsonx Assistant, watson Discovery로 Question-Answering 구축하기

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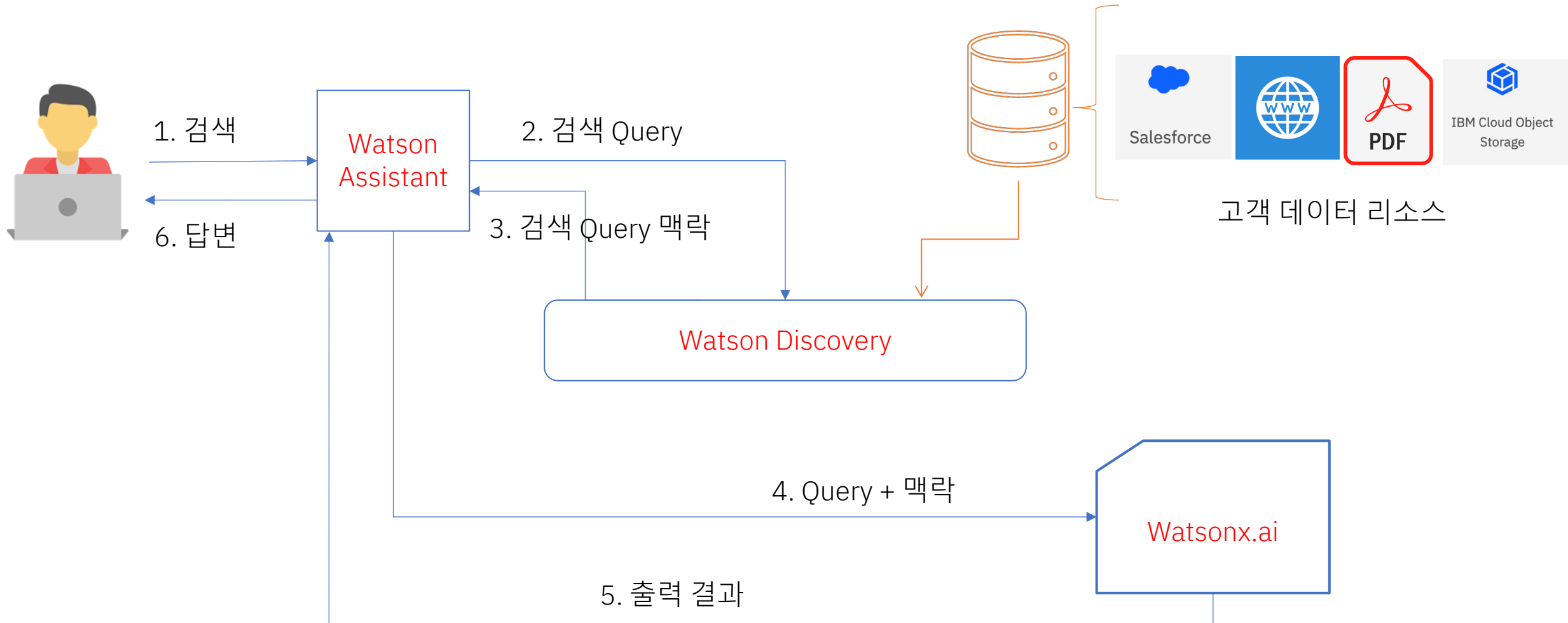
watsonx.ai



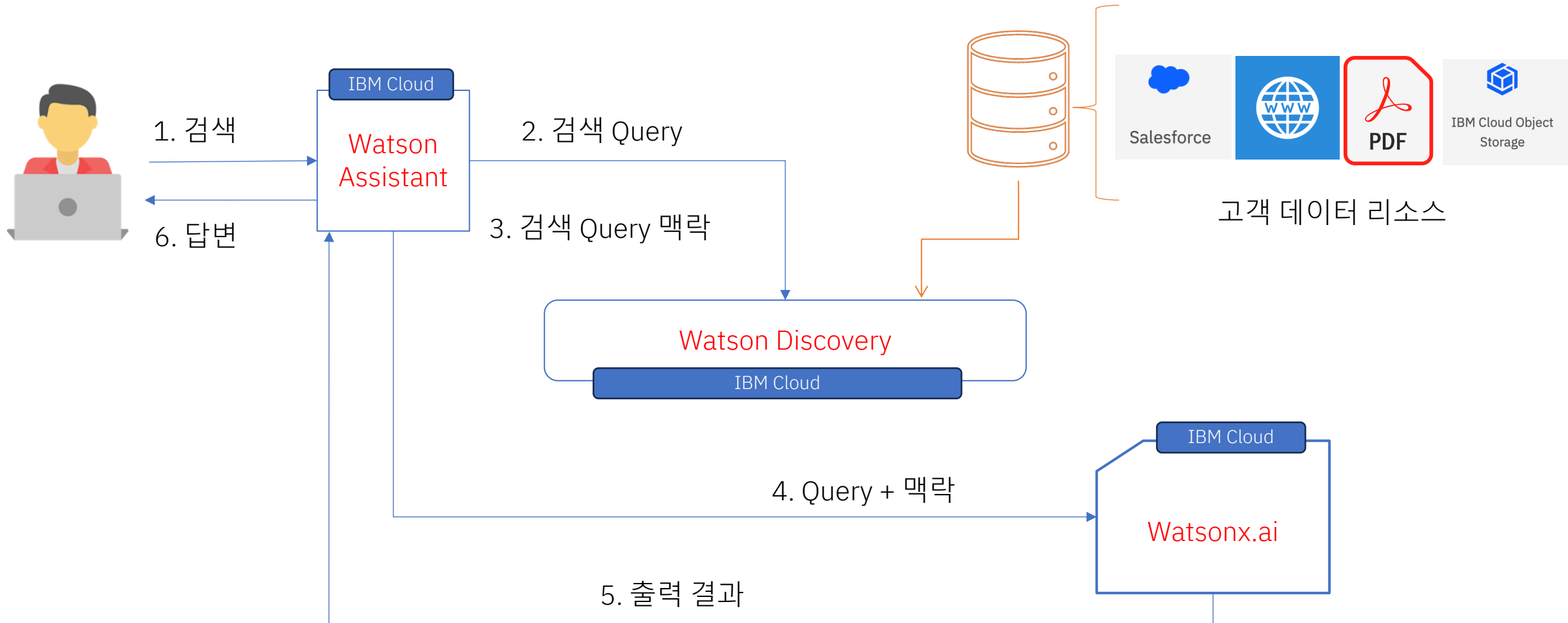
Retrieval-Augmented Generation (RAG)



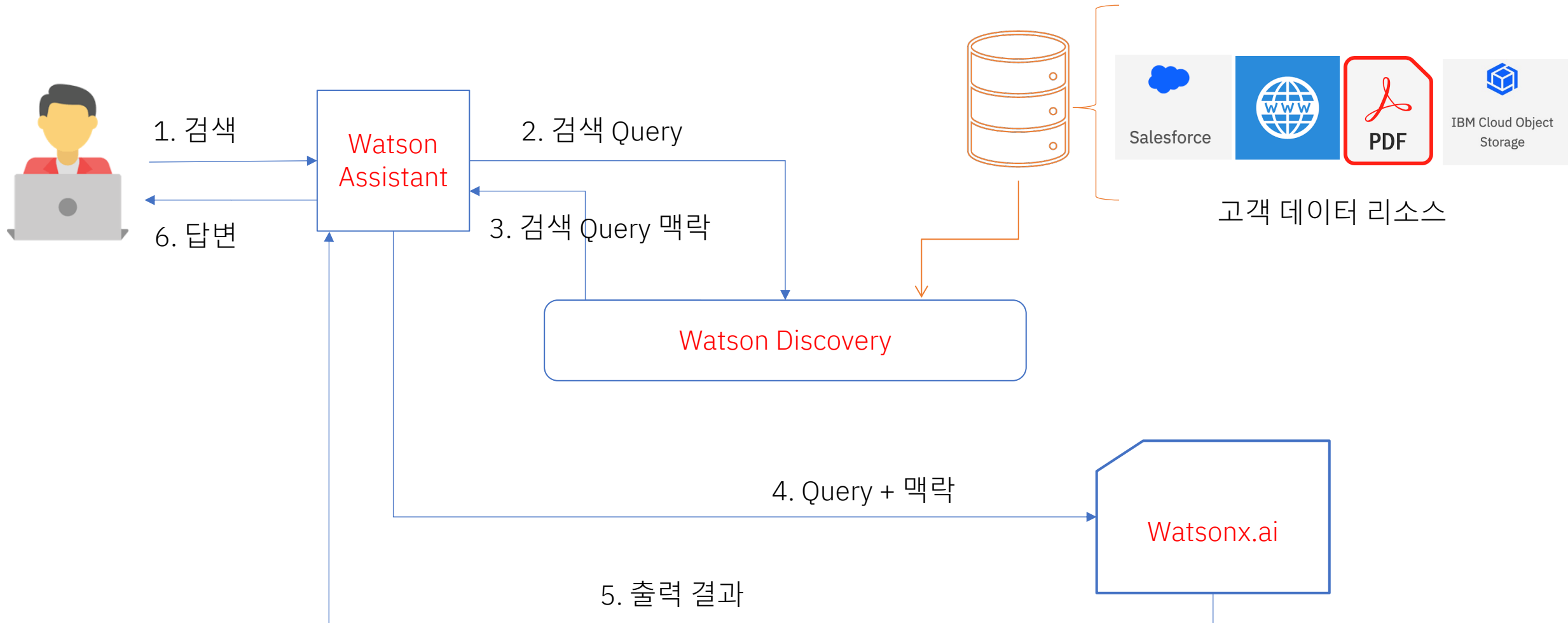
watsonx.ai, watsonx Assistant, watson Discovery를 통한 질의응답 구성해보기



워크샵에서 사용하는 Architecture 구성



Step 0 –Watson Discovery에서 문서 인덱싱하기 (workshop 진행자가 사전에 완료)



Step 1: Watson Discovery URL, Watson Discovery API key and Watson Discovery Collection ID 를 저장해두세요

1. IBM Cloud에 로그인

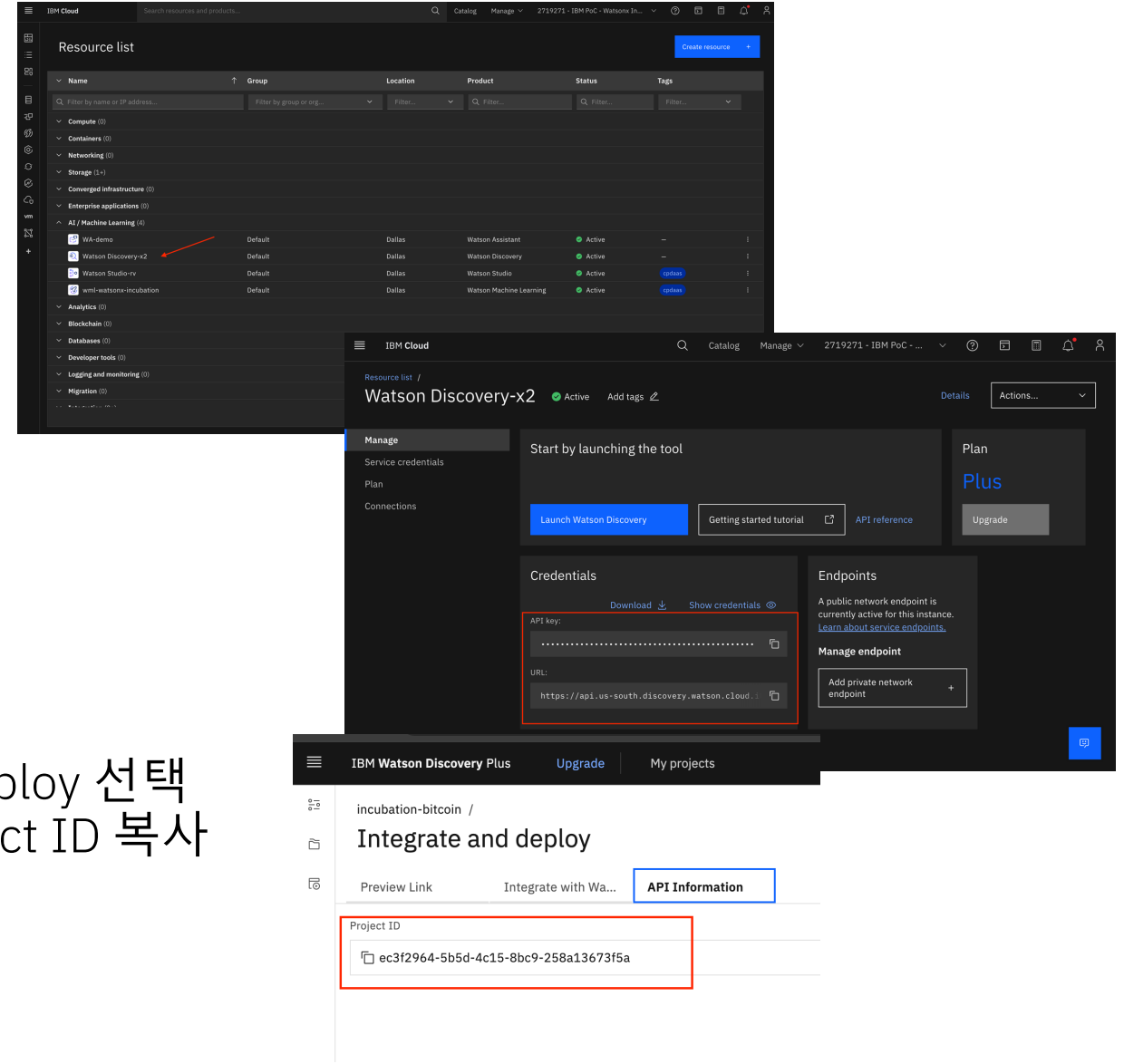
1. 네비게이션 메뉴로 이동 (왼쪽 상단)
2. Resource List 선택
3. AI/Machine Learning 선택

2. Watson Discovery Service 선택

1. Credentials로 이동
2. API key 복사 붙여넣기 해두기
3. URL 복사 붙여넣기 해두기

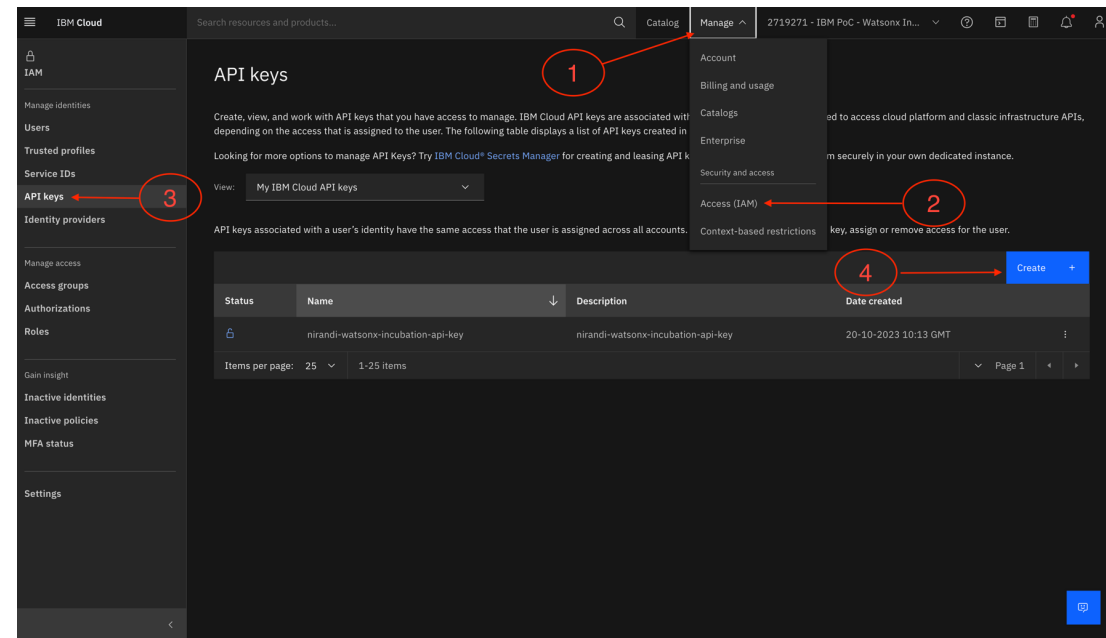
3. Launch Watson Discovery

1. 네비게이션 메뉴 -> Integrate and Deploy 선택
-> API Information으로 이동 -> Project ID 복사



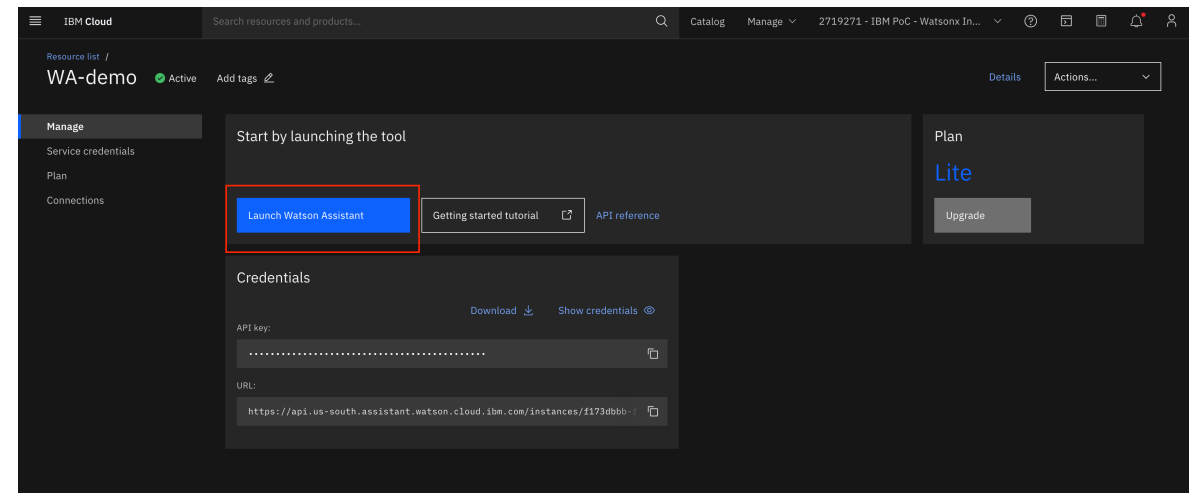
Step 2: IBM Cloud를 위해 API Key 저장해두기

1. 이전 튜토리얼에서 사용했던 API Key를 사용합니다.
2. API가 없다면 아래 가이드를 따라하세요
 1. IBM Cloud 접속
 2. Manage à Access (IAM) à API keys
 3. API key 이름과 설명을 작성.
 4. Create 선택.
 5. Show 선택하여 API key 확인. 또는 copy를 선택하여 미리 복사해두거나 Download를 선택하여 파일 형태로 저장해 둘 수 있습니다.



Step 3: Watson Assistant instance Launch 해보기

1. IBM Cloud에 로그인
 1. Navigation Menu로 이동
 2. Resource List 선택
 3. AI/Machine Learning 선택
2. Watson Assistant Service 선택
 1. Launch Watson Assistant 선택

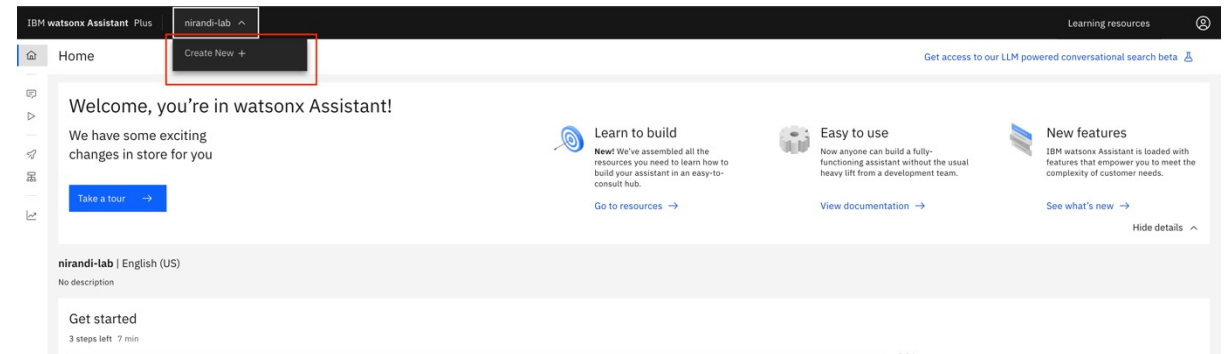
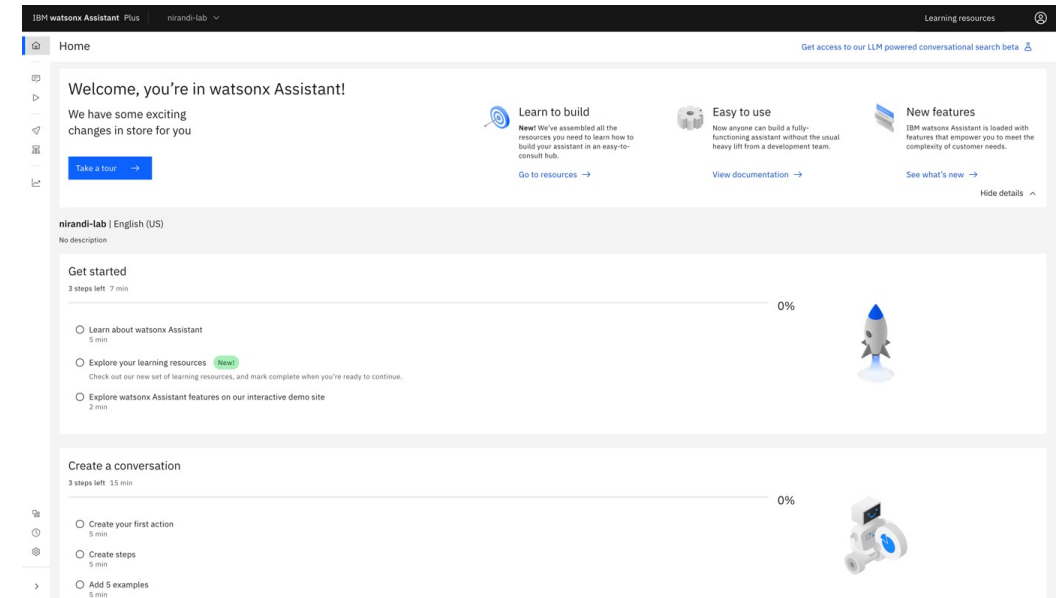


Step 4: Watson Assistant에서 New Chat Instance 생성

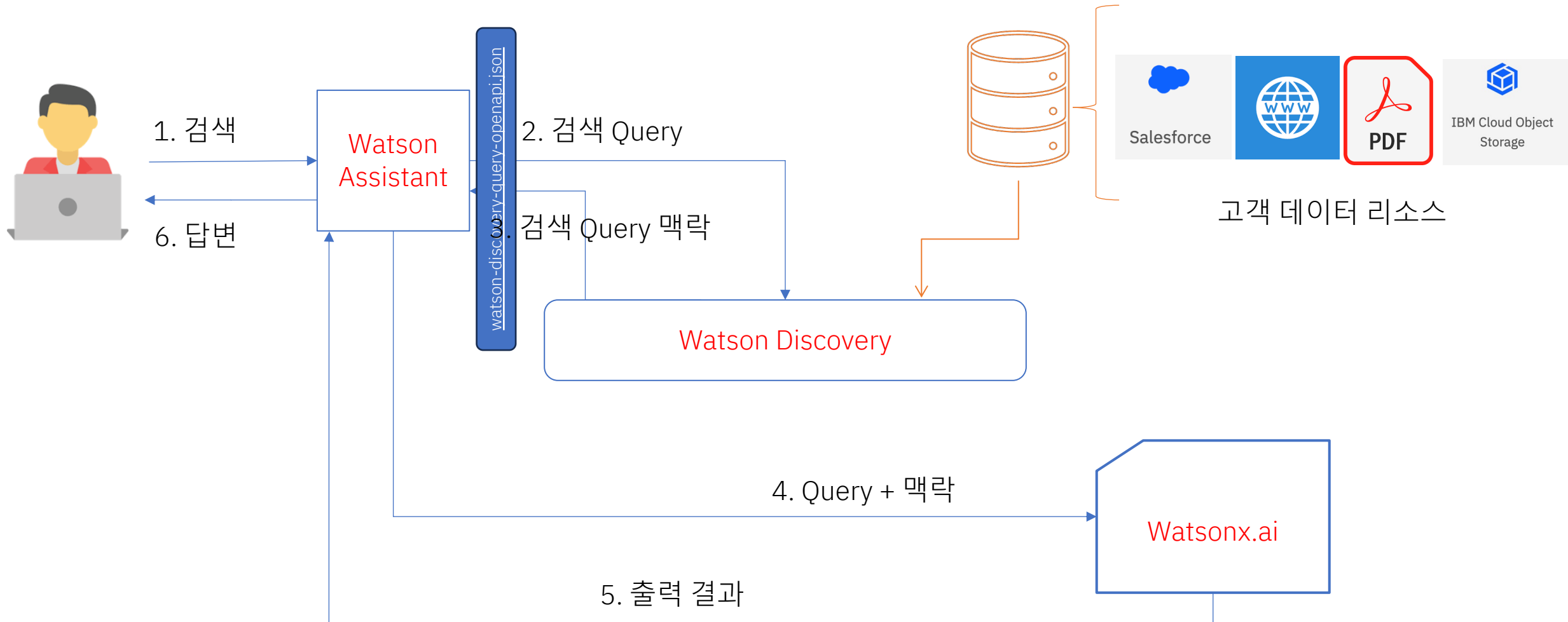
1. Watson Assistant Home Page에 접속

2. 상단의 드롭다운 메뉴에서 “Create New” 선택

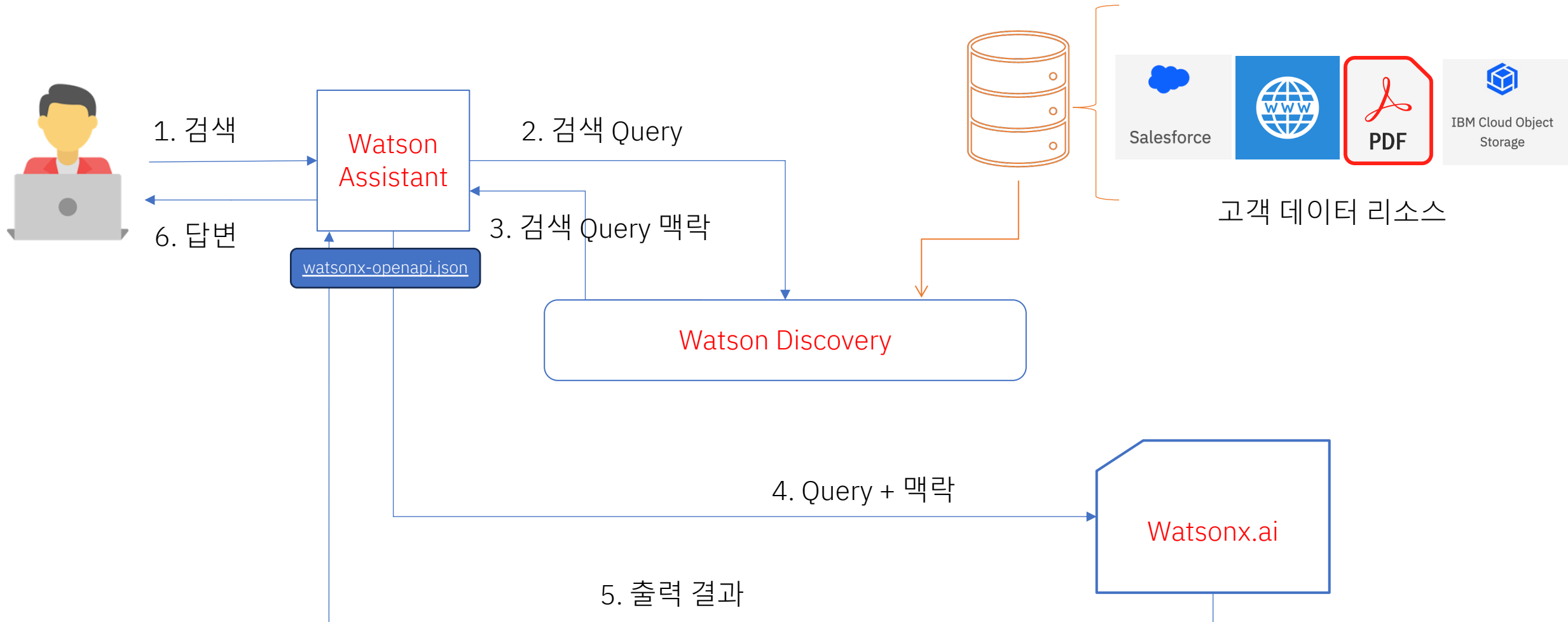
1. 챗 인스턴스 생성 생성 포맷: “<your-name>-qa-chat-demo”
2. 필요 정보 기재



Step 5: Watson Assistant에서 Watson Discovery용 Custom Extension 추가



Step 6: watsonx.ai에서 watson Assistant 에 커스텀 익스텐션 추가



Step 7– Actions Flows 등록

[discovery-watsonx-actions.json](https://github.com/knijesh/GenAI_Incubation_watsonx/tree/main/lab%207%20-%20Building%20Question-Answering%20with%20watsonx.ai%2C%20watsonx%20Assistant%2C%20watsonx%20Discovery)



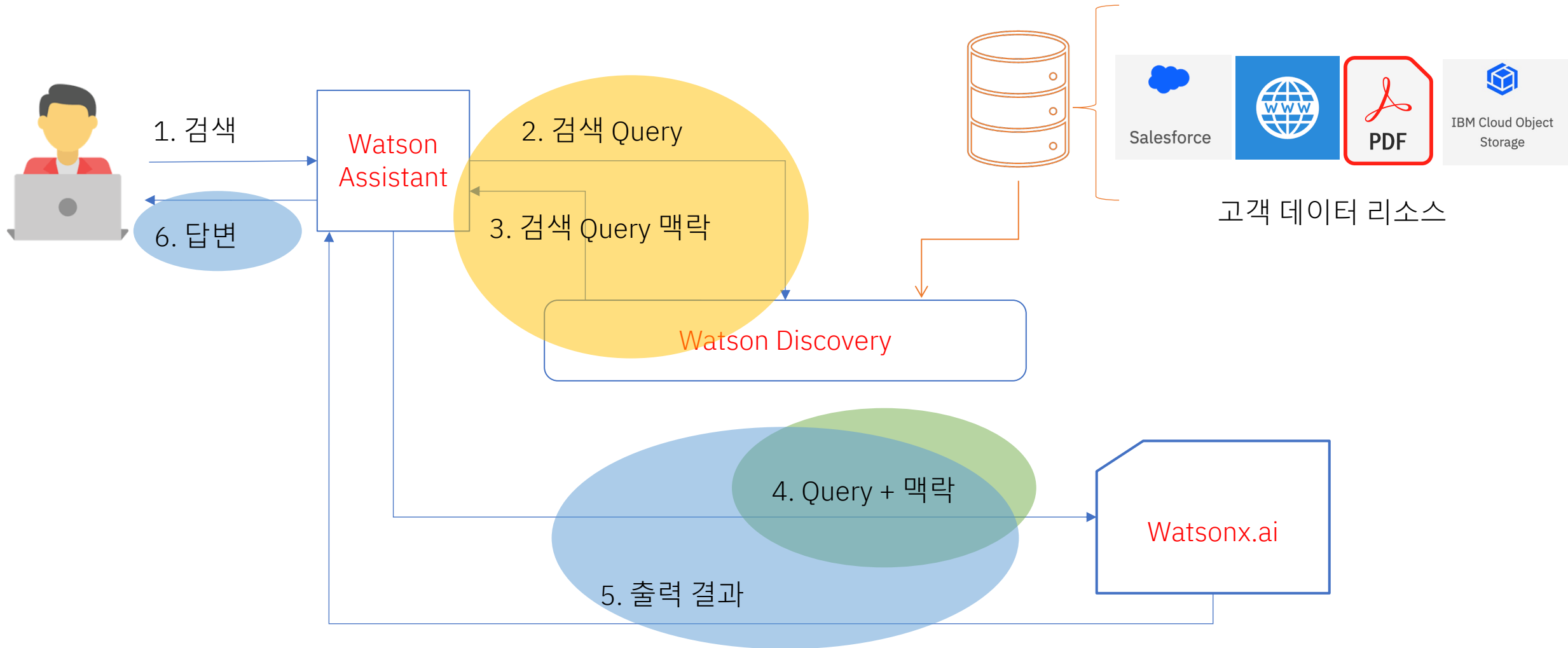
검색



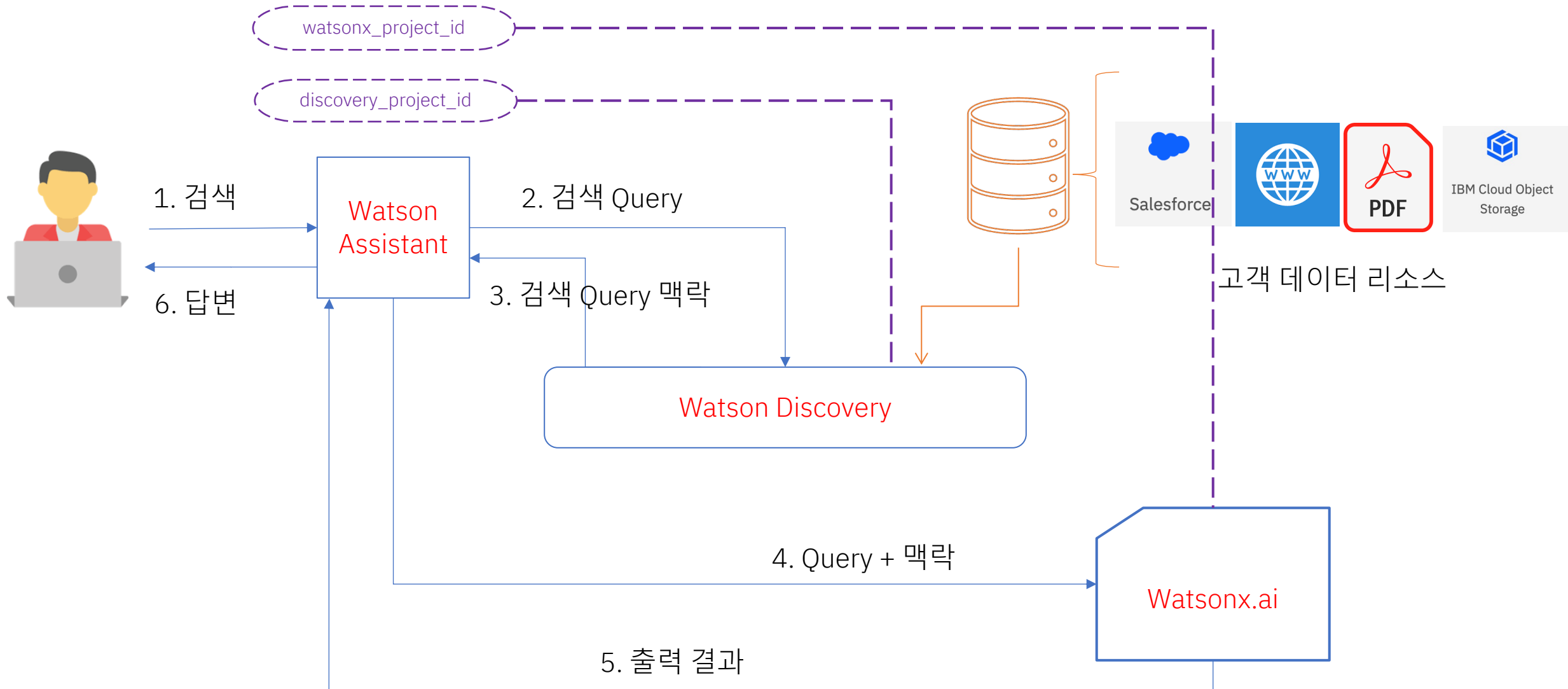
대답 생성



watsonx
generation API
호출



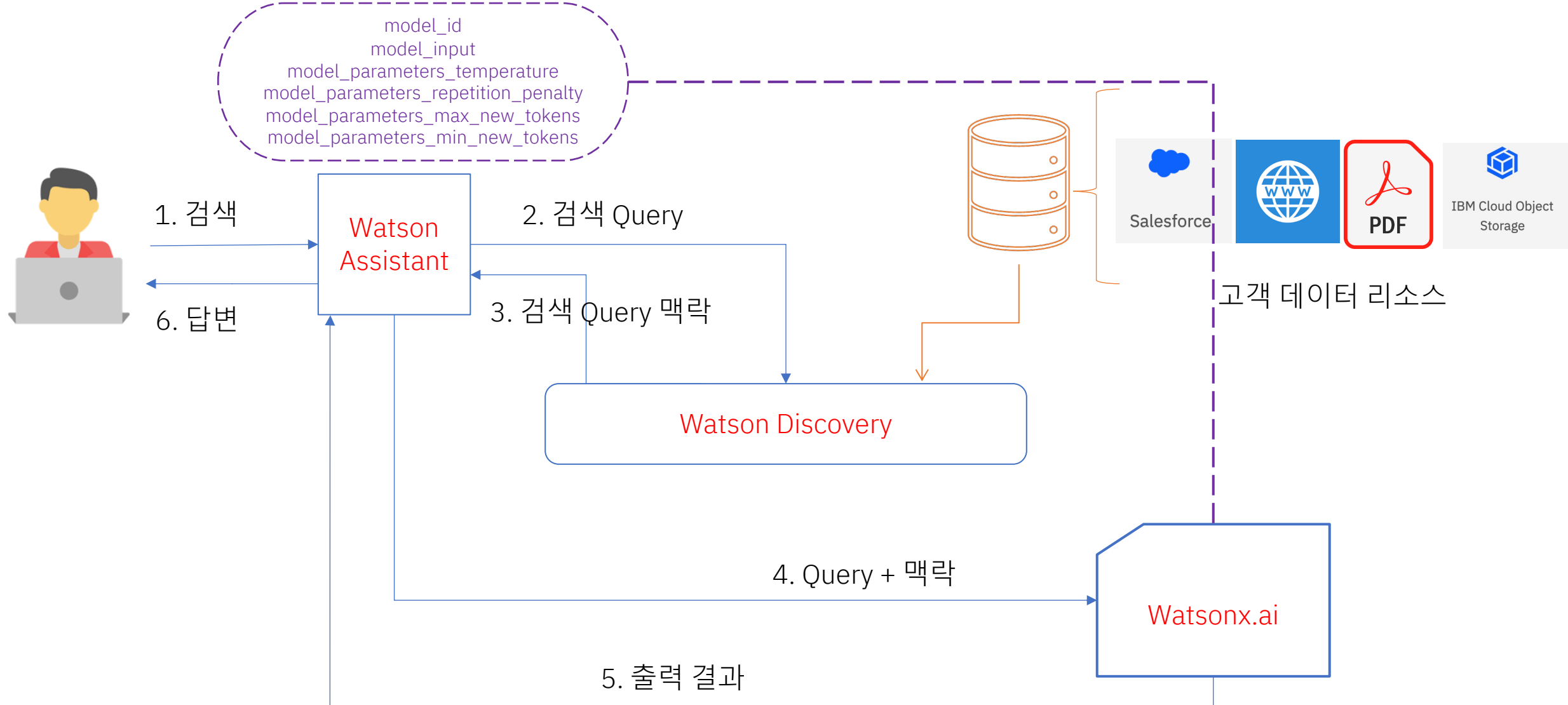
Step 8-Variable Update (필수사항)



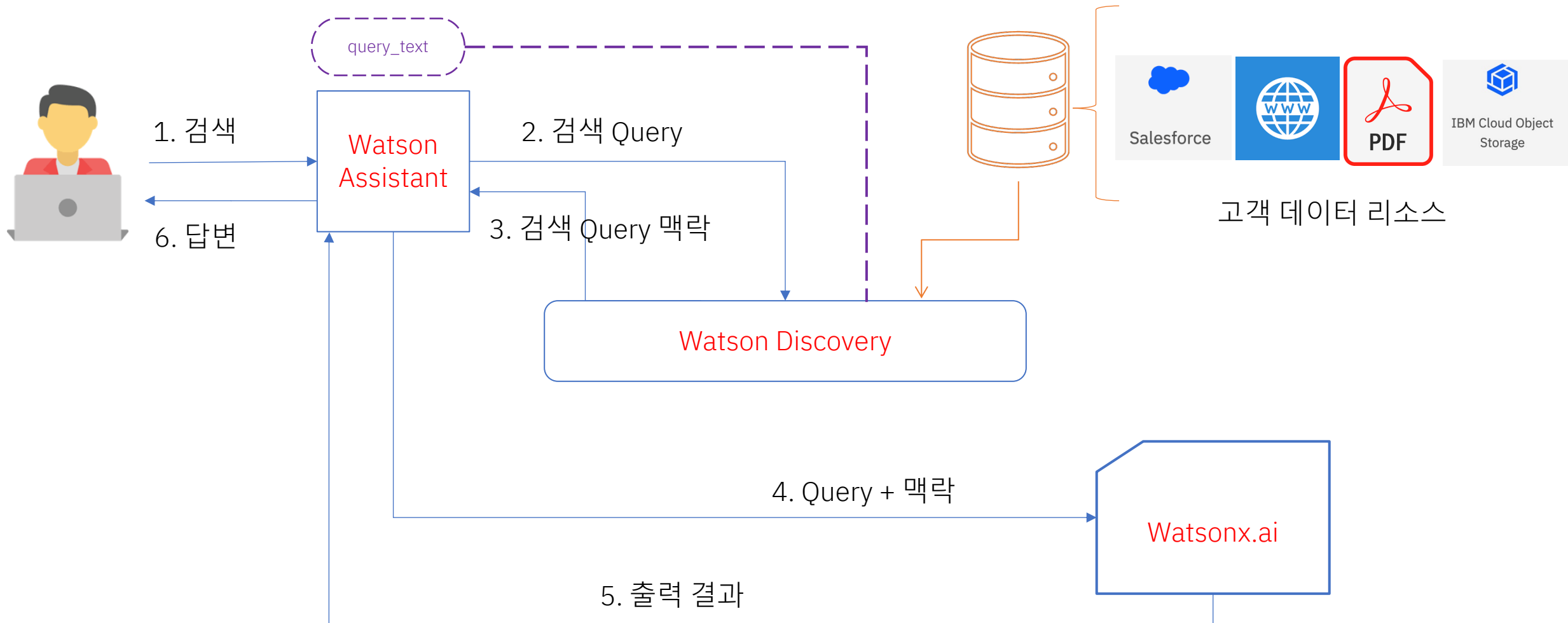
A person with long hair, wearing a brown hat, an orange vest, and dark pants, is captured mid-jump on a sandy beach. Their arms are raised in a 'V' shape, and they are wearing yellow and blue sneakers. The background shows a calm sea, a rocky coastline with trees, and a hazy sky. Overlaid on the image is the text 'RAG Pattern 구현 완료!' in white, bold, sans-serif font, with 'Hooray!!' below it. A white horizontal line is positioned just below the text.

RAG Pattern 구현 완료!
Hooray!!

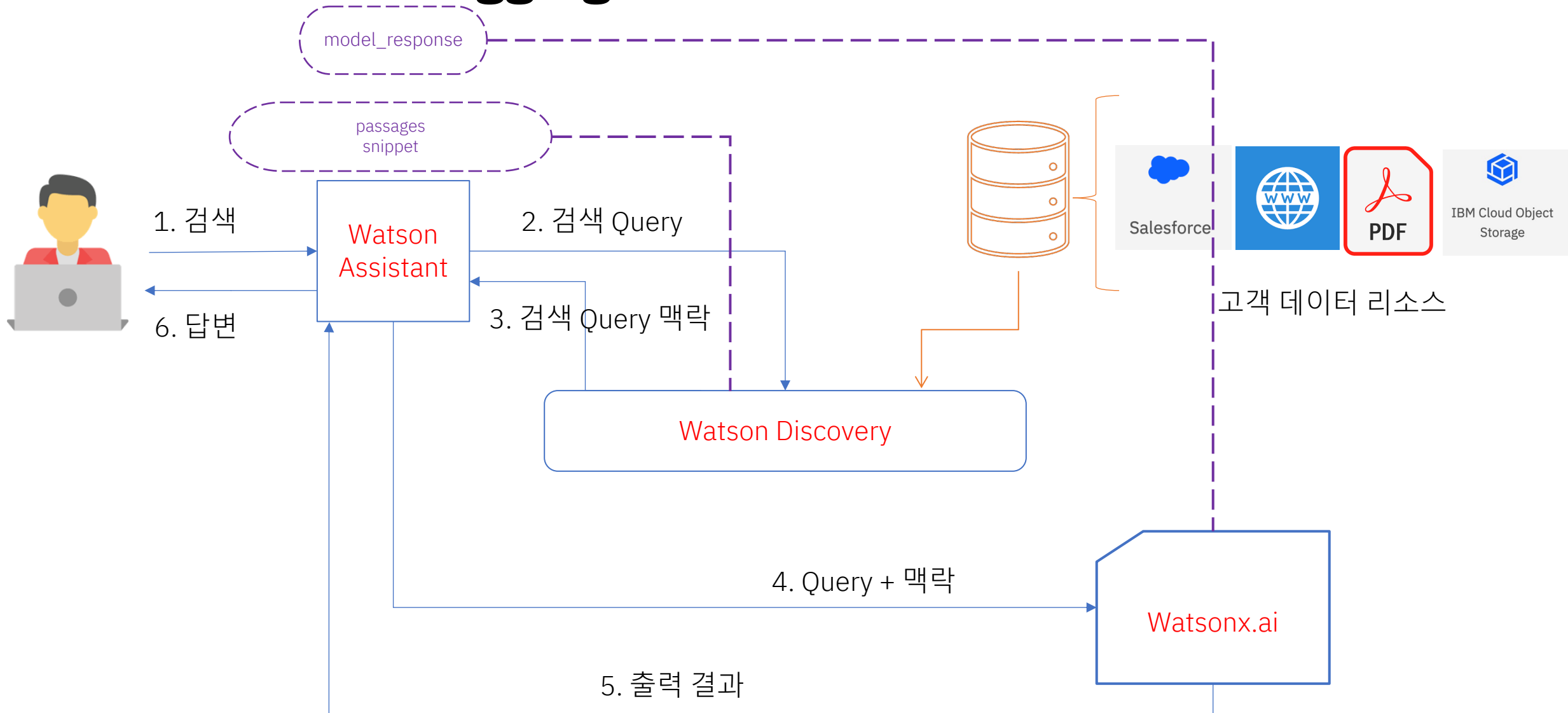
선택사항: 조정해볼 수 있는 Variables – watsonx.ai 관련



선택사항 : 조정해볼 수 있는 Variables – watson Discovery 관련



선택사항: Debugging 변수



Any Questions?

RAG(Retrieval-Augmented Generation) 패턴을 기반으로
나만의 Agent Assistant가 완성되었어요 이제 마음껏 Play 해보세요 !