

# U-ITE Diagnostic Logic: Plain English If/Else Structure

This document translates the U-ITE's high-level diagnostic flow into a structured, plain English if/else logic, suitable for initial development and clear communication of the system's decision-making process.

## Diagnostic Logic Flow

### Check 1: Local Network Reachability (Router)

Plain Text

```
IF (Router is NOT reachable)
  THEN:
    // Truth Statement
    "Internet problem is likely caused by this device or local network."
ELSE:
  // Proceed to Check 2
  Continue to next diagnostic step.
```

### Check 2: Core Internet Reachability (ISP Network)

Plain Text

```
IF (Internet is NOT reachable at all)
  THEN:
    // Truth Statement
    "Internet problem is likely within the ISP network."
ELSE:
  // Proceed to Check 3
  Continue to next diagnostic step.
```

### Check 3: Name Resolution (DNS)

Plain Text

```
IF (Website names CANNOT be resolved)
  THEN:
    // Truth Statement
    "Internet is working, but the destination service is unreachable."
    // Note: This simplifies the underlying DNS failure for the MVP.
```

```
ELSE:  
    // Proceed to Check 4  
    Continue to next diagnostic step.
```

## Check 4: Application Layer Connectivity (Real Website)

Plain Text

```
IF (A real website CANNOT be opened)  
    THEN:  
        // Truth Statement  
        "Internet is working, but the destination service is unreachable."  
ELSE:  
    // Final Truth Statement  
    "Internet connection is healthy at this time."
```