# Decision Trace Configuration Options for Rule Execution Server

This document provides an overview of the different methods for enabling or disabling the decision trace in the Rule Execution Server (RES),   
outlining the benefits of each approach. The goal is to select the best approach to allow IT teams to manage decision trace toggling flexibly without requiring business involvement or redeployment.

**Option 1: Configuring Decision Trace in Decision Center During Deployment**

**Description**: Enable or disable decision trace directly within Decision Center before deploying the ruleset to RES.

* **Pros**:
  + **Centralized Control**: Provides a single, centralized point for trace configuration during deployment, keeping trace settings aligned across environments.
  + **Environment-Specific**: Allows trace to be enabled selectively based on deployment configurations for specific environments (e.g., only in production).
* **Cons**:
  + **Business-Side Management**: Requires the business side to maintain trace properties, which can create a dependency if trace adjustments are needed quickly.
  + **Requires Redeployment for Changes**: Every trace configuration change requires redeployment, making it cumbersome for temporary adjustments or testing purposes.
  + **Less Dynamic**

**Option 2: Using Property File on the Rule Execution Server (RES)**

**Description**: IT manages a property file on the RES that sets the trace configuration, toggling as needed without redeployment.

* **Pros**:
  + **No Redeployment Needed**: Allows trace settings to be adjusted without redeployment, providing flexibility for temporary needs or quick adjustments.
  + **IT Ownership**: Ensures trace management stays with the IT team, removing the need for business involvement in property configuration on RES.
  + **Business Separation**: Reduces the dependency on the business team, allowing them to focus on rules while IT controls server-side configurations.

**Option 3: Using the REST API to Update Trace Property**

**Description**: IT can use the RES REST API to dynamically update the trace setting.

* **Pros**:
  + **Dynamic Control**: Provides quick, on-demand toggling without redeployment or manual uploads, allowing for flexible trace management.
  + **Automated Option**: Fits well with automated processes or scripting to enable trace temporarily based on specific conditions or schedules.
  + **IT-Managed**: Keeps control within IT’s domain, maintaining security and consistency in the trace configuration.