# Dynatrace Integration with React SPA (Pega Backend)

## Overview

This guide explains how to integrate Dynatrace Real User Monitoring (RUM) into a React Single Page Application (SPA), while respecting user consent and tagging user sessions using Pega DX API.

## Goals

* Enable frontend monitoring using Dynatrace RUM.
* Delay tracking until the user gives cookie consent.
* Tag users in Dynatrace using Pega DX API response.
* Ensure SPA compatibility with Dynatrace.

## Dynatrace Setup

* Create a Web Application in Dynatrace.
* Copy the JavaScript RUM snippet provided (starts with ruxitagentjs\_...).
* Enable SPA support in the Web Application settings (important for React).

## React Implementation

## 1. Load Dynatrace Script Dynamically

javascript  
export const loadDynatrace = () => {  
 const script = document.createElement('script');  
 script.src = 'https://<your-dynatrace-url>/ruxitagentjs\_XXXX.js?app=react-app';  
 script.setAttribute('data-dtconfig', 'app=react-app|spa=1|reportUrl=https://<your-collector>');  
 script.async = true;  
 document.head.appendChild(script);  
};

## 2. Cookie Consent Component

javascript  
const CookieConsent = ({ onAccept }) => {  
 const [visible, setVisible] = useState(!localStorage.getItem('cookieConsent'));  
  
 const handleAccept = () => {  
 localStorage.setItem('cookieConsent', 'true');  
 setVisible(false);  
 onAccept();  
 };  
  
 return visible ? (  
 <div>  
 <p>This site uses cookies for monitoring. Do you accept?</p>  
 <button onClick={handleAccept}>Accept</button>  
 </div>  
 ) : null;  
};

## 3. React App Integration

javascript  
useEffect(() => {  
 const consent = localStorage.getItem('cookieConsent');  
 if (consent === 'true') {  
 loadDynatrace();  
 window.dtrum?.identifyUser('user123'); // Replace with Pega user ID  
 }  
}, []);

## How It Works

## Cookies to Document

## Disable Dynatrace if Consent Not Given

- Dynatrace script is not added to DOM.  
- No tracking or cookies are initialized until consent is true.

## Next Steps

* Replace placeholder URLs and app names.
* Test using Dynatrace Live Session viewer.
* Extend tagging with custom metadata (like user role, region, etc).

## References

* Dynatrace Docs – RUM Setup: https://docs.dynatrace.com/docs/observe/digital-experience/web-applications
* React SPA Best Practices: https://docs.dynatrace.com/docs/observe/digital-experience/web-applications/single-page-applications