Speed time to better AI outcomes

Grow and innovate faster
Build and scale AI with trust and transparency

Watson Studio Premium for Cloud Pak for Data
Accelerate data science and AI project delivery with IBM Watson™ Studio Premium for Cloud Pak for Data

**Value propositions**

**Automate AI**
Accelerate your path to an AI-powered enterprise.

**Future proof AI investments**
Mix and match open source and IBM innovations. Avoid lock-in.

**Predict and optimize**
Optimize decisions with machine intelligence.

**Empower citizen data scientists**
Activate and reskill analytic experts to be AI-ready.
By 2025, 50% of data scientist activities will be automated by artificial intelligence, easing the acute talent shortage.¹

By 2023, 70% of AI workloads will use application containers or be built using a serverless programming model necessitating a DevOps culture.¹

IBM Watson Studio
Premium for Cloud Pak for Data

Build and scale AI with trust and transparency.
Artificial intelligence (AI) is transforming businesses everywhere. A sound AI strategy is built on environments and tools that make analyzing data and building AI models easier and more accessible. For AI to thrive, it’s imperative that your team can quickly get onboard, scale and automate AI across multiple clouds.

To drive desired AI outcomes you need to inject predictive insights into business processes by harnessing the power of prediction and optimization.

This requires organizations to:
– Accelerate data science projects by automating the data science lifecycle.
– Deploy enterprise AI virtually anywhere, on the clouds of your choice.
– Unify AI across private, hybrid and multicloud landscapes.
– Simplify data science tasks with the broader ecosystems of data they rely on.
– Tap into the open innovation of IBM® Cloud™ Paks and OpenShift.

According to the IBM Research estimate, optimizing an AI model pipeline is traditionally highly iterative. The pipeline is often optimized for one objective and constraint at a time, which may have a severe impact on quality. A typical project consumes 1–6 data scientists for 2–12 months.
**Build and scale AI across your enterprise**

Watson® Studio Premium for IBM Cloud Pak for Data includes a powerful set of capabilities that are open by design and key to operationalizing data science. It includes everything organizations need to build and deploy AI and machine learning (ML) models, accelerate data science projects and enable an end-to-end automated lifecycle. It’s also one of the most unique enterprise AI offerings that enable organizations to predict and optimize business outcomes.

**Automate AI lifecycle management**

AutoAI, available as part of the base of the Cloud Pak for Data, can help you automate data science projects by as much as 80 percent. AutoAI automatically analyzes your data and generates candidate model pipelines. These model pipelines are created over time as AutoAI algorithms learn more about your data set and discover data transformations, estimator algorithms, and parameter settings that work best for your problem setting. Results are displayed on a leaderboard, showing the automatically generated model pipelines which are ranked according to your problem optimization objective.

Watson Studio Premium consists of:
- IBM Decision Optimization
- IBM SPSS Modeler
- Hadoop Execution Engine
- Mix and match the capabilities based on your consumption needs.

**Automate AI lifecycle management with Cloud Pak for Data**

*Figure 1. The AutoAI leaderboard shows the candidate model pipelines.*
Bring analytics to your data
Included as part of Watson Studio Premium, the Hadoop Execution Engine helps you improve your insight by bringing AI and ML models to Hadoop and the big data ecosystem. This approach obviates the need to move data to where AI processing takes place. It can be configured for high availability and allows data scientists to explore, train and deploy models at scale with the distributed compute on Hadoop, helping to provide secure access to the data.

Predict and optimize business outcomes
With Watson Studio Premium, you can optimize your decisions by building predictive and optimization models within a unified environment. IBM Decision Optimization helps you facilitate the workflow of selecting and editing data for your optimization problem. It enables you to run the optimization models and create and share reports with tables, charts and notes in the dashboard. Modeling Assistant for Decision Optimization has a natural-language-based interface to quickly build optimization models and visualize resource allocations, scheduling and plans.

Empower citizen data scientists
Watson Studio Premium helps you activate and reskill data and analytic experts to be AI ready. It enables your team to prepare data, train the model and evaluate it without coding with an intuitive drag-and-drop interface using IBM SPSS® Modeler. You can also use Data Refinery as part of the Cloud Pak for Data to cleanse and shape tabular data with a graphical flow editor as a set of ordered operations on data. Data Refinery includes a graphical interface to profile and validate your data, and customizable charts for insights into your data that complement IBM SPSS® Modeler.

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**Scenario 1**

Prepare data
2 tables

Run model
Modeling Assistant

Explore Solution

**Modeling Assistant**

What type of decision do you want to optimize? Choose one of these domains.

<table>
<thead>
<tr>
<th>Resource Assignment</th>
<th>Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>You want to assign (or match) resources to jobs, events, places.</td>
<td>You want to manage tasks, activities, events... with a precedence order.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Selection and Allocation</th>
<th>Supply and Demand Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>You want to select items (or combinations) from the same table.</td>
<td>You want to decide plant production, inventory and supply, per time period, to satisfy customer demand.</td>
</tr>
</tbody>
</table>

Don’t see your type of decision? Code your model in Python or OPL.

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Figure 2. Modeling Assistant allocates resources, optimizes schedules and accelerates supply-and-demand planning.
Try Watson Studio
to drive AI success

Get started for free!
Start your Watson Studio Cloud →
Experience AutoAI today →