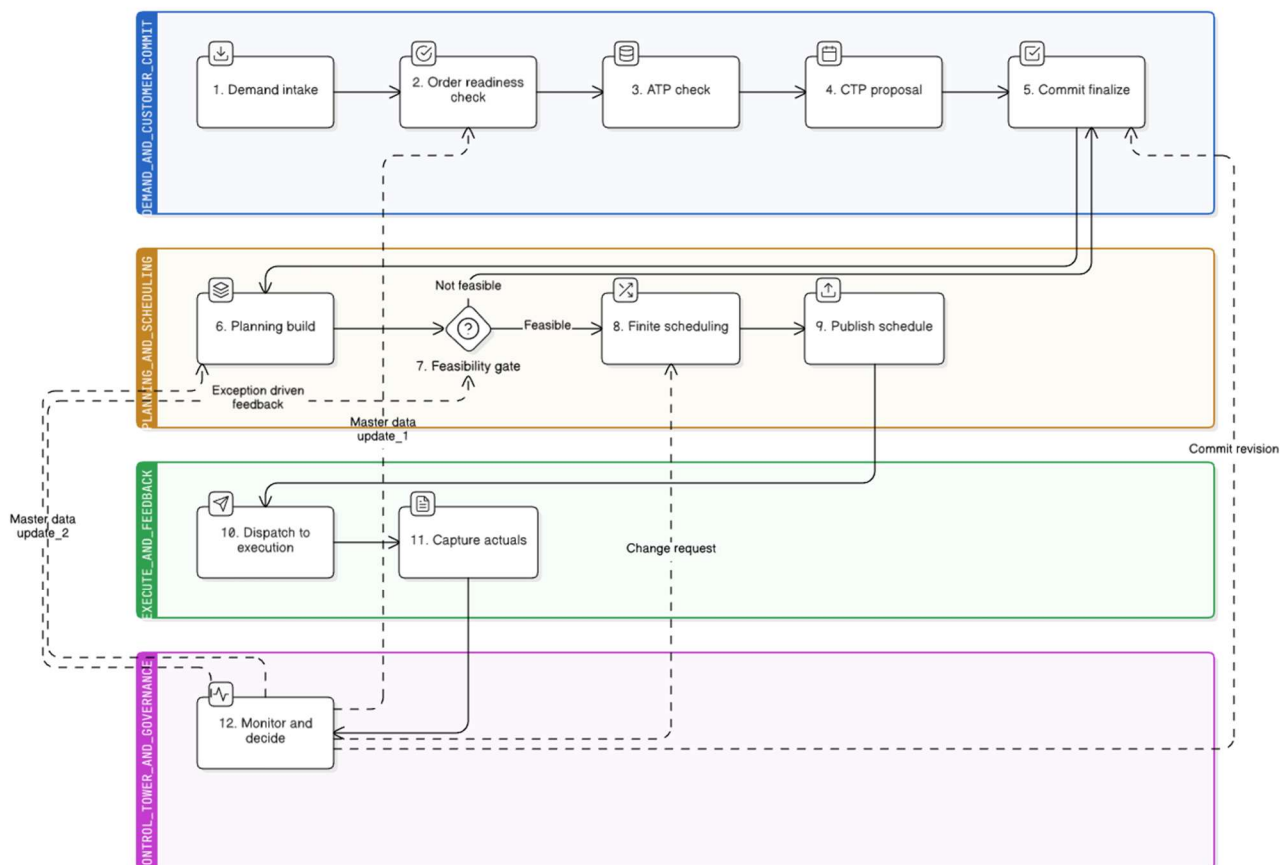


# Rayterton Production Planning & Scheduling System (PPS)

Rayterton PPS manages the planning and scheduling flow from demand intake to execution feedback. It calculates promise dates using ATP and CTP logic, based on material availability and finite capacity. It creates detailed schedules with constraints such as work center capacity, labor, tooling, calendars, maintenance windows, and changeovers. It publishes schedules using version control, approvals, audit trail, and controlled overrides. It captures dispatch and actual execution data, then uses exceptions to trigger replanning with traceable evidence.

## End-to-end operating story



## Demand to Promise

Rayterton PPS consolidates forecast and sales orders into a single demand view. For each order line, the system calculates a committed date using material availability and finite capacity constraints. The calculation can reference key capacity drivers, such as which work centers and operations determine the earliest feasible completion. When shortages occur, the system applies priority rules for allocation and expediting, and it records the decision reason. It maintains pegging links from demand to planned orders so users can trace which supply and operations support each commitment. It also supports controlled commit overrides by role, so changes to commitments are captured, reviewed, and auditable.

### Key controls

- Commit override requires a reason code and is logged.
- Expedite requests follow an approval workflow.
- Role permissions control who can change commits and priority class.

Home / PPS / Demand

Demand Inbox + ATP/CTP Promise Desk

Plant: Jakarta Main (ID-JKT-01)

21/01/2026

20/02/2026

Search SO, Customer, Product.

Export

Evidence Pack

Open Orders: 847

At-Risk Orders: 142

Avg Promise Lead Time: 12.4 days

Capacity Risk: 89

Material Risk: 67

Frozen Zone Violations: 23

SO No	Customer	Product	Qty	UoM	Req Date	Promise Date	Commit	Pri	Risk	Margin	SLA	Owner	Status
S0-2026-0001	PT Indofood Sukses	Noodle Premium 500g	5,000	PCS	2026-02-05	2026-02-08	ATP	A	-	Tier 1	99.2%	Budi Santoso	Approved
S0-2026-0002	Unilever Indonesia	Detergent Liquid 2L	3,200	L	2026-02-10	2026-02-15	CTP	B	Capacity	Tier 1	98.5%	Rina Wijaya	Pending
S0-2026-0003	PT Astra International	Auto Part AX-200	850	PCS	2026-02-12	2026-02-18	CTP	A	Material	Tier 2	96.8%	Ahmad Hidayat	Approved
S0-2026-0004	Nestle Indonesia	Milk Powder 1kg	2,400	KG	2026-02-14	2026-02-17	ATP	B	-	Tier 1	97.2%	Siti Rahayu	Approved
S0-2026-0005	PT Mayora Indah	Biscuit Choco 200g	8,000	PCS	2026-02-16	2026-02-20	ATP	C	-	Tier 3	94.5%	Dewi Kartika	Pending
S0-2026-0006	Samsung Electronics	Display Panel 27"	320	PCS	2026-02-18	2026-02-25	CTP	A	Frozen	Tier 1	98.9%	Park Ji-hoon	At Risk
S0-2026-0007	PT Kalbe Farma	Paracetamol 500mg	15,000	TAB	2026-02-20	2026-02-22	ATP	A	-	Tier 1	99.5%	Dr. Setiawan	Approved
S0-2026-0008	Toyota Astra Motor	Brake Pad Set	1,200	SET	2026-02-22	2026-02-28	CTP	B	Capacity	Tier 2	95.8%	Tanaka Kenji	Pending
S0-2026-0009	PT Ultra Jaya	Juice Box 250ml	25,000	PCS	2026-02-24	2026-02-26	ATP	C	-	Tier 3	92.3%	Lestari Putri	Approved
S0-2026-0010	PT Wings Group	Shampoo 180ml	6,500	ML	2026-02-25	2026-03-01	CTP	B	Material	Tier 2	96.1%	Wibowo Hartono	Pending
S0-2026-0011	PT Garuda Indonesia	In-flight Meal Kit	4,800	KIT	2026-02-26	2026-03-02	CTP	A	Frozen	Tier 1	97.8%	Irfan Bachdim	At Risk
S0-2026-0012	PT Pertamina	Lubricant 4L	2,100	L	2026-02-28	2026-03-03	ATP	B	-	Tier 2	94.7%	Rudi Hartono	Approved
S0-2026-0013	PT Telkom Indonesia	Fiber Cable 100m	560	M	2026-03-01	2026-03-05	ATP	C	-	Tier 3	91.2%	Agus Setiawan	Pending
S0-2026-0014	PT Bank Central Asia	Security Seal Roll	8,900	RL	2026-03-02	2026-03-06	CTP	A	Capacity	Tier 1	98.3%	Dian Sastro	Pending
S0-2026-0015	PT Indo Tambang	Mining Helmet	340	PCS	2026-03-04	2026-03-08	ATP	B	-	Tier 2	95.6%	Bambang Pamungkas	Approved

Showing 1-15 of 847 orders

Previous123Next

Order Details: SO-2026-0001

PT Indofood Sukses - Noodle Premium 500g

CTP Explanation

Driving Work Center: Line A-12 (Packaging)

Earliest Slot: 2026-02-08 08:00

Constraint: Shift capacity at 85%, material available

Pegging Preview

Demand: SO-2026-0001

Planned Order: PO-2026-04582

Work Order: WO-2026-8921

Operation: OP-120 (Final Pack)

Impact Summary

Late Risk

0 orders

Overtime Est.

2.5 hrs

Changeover

45 min

Utilization

87%

At-Risk Trend (7 Days)

Approve Commit

Request Expedite

Split Order

Allocate

Send to Scenario

Last sync: 2026-01-21 10:45:32 UTC+7

Data freshness: 2 min

Run ID: PPS-2026-0121-1045

Version: v4.2.1

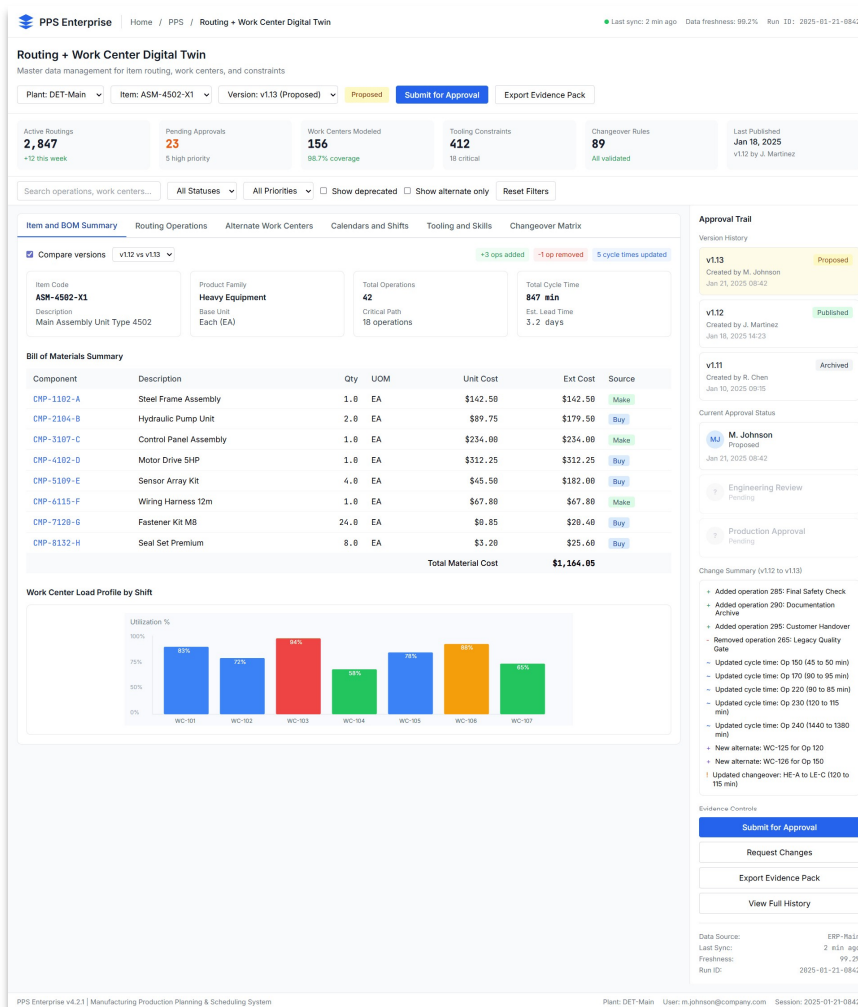
## Planning Model and Master Data

Rayterton PPS maintains scheduling master data that is required for finite planning. This includes item master and BOM, yields, substitutions, and rules for alternate materials when allowed. It also covers routing operation standards, alternate routings, work centers, shift calendars, and maintenance windows. Secondary constraints can be modeled, such as

tooling availability, labor skill requirements, and QA holds that block scheduling or release. The system supports governed versioning, so changes to routings, calendars, and changeover matrices can be prepared, reviewed, and published as a controlled version. It also provides approval gates and segregation of duties, so master data changes that affect feasibility and promised dates do not occur silently.

## Key controls

- Version control for routings, calendars, and changeover matrices.
- Approval gates for master data changes that impact promised dates and capacity.
- Separation of duties between master data owners and schedule publishers.



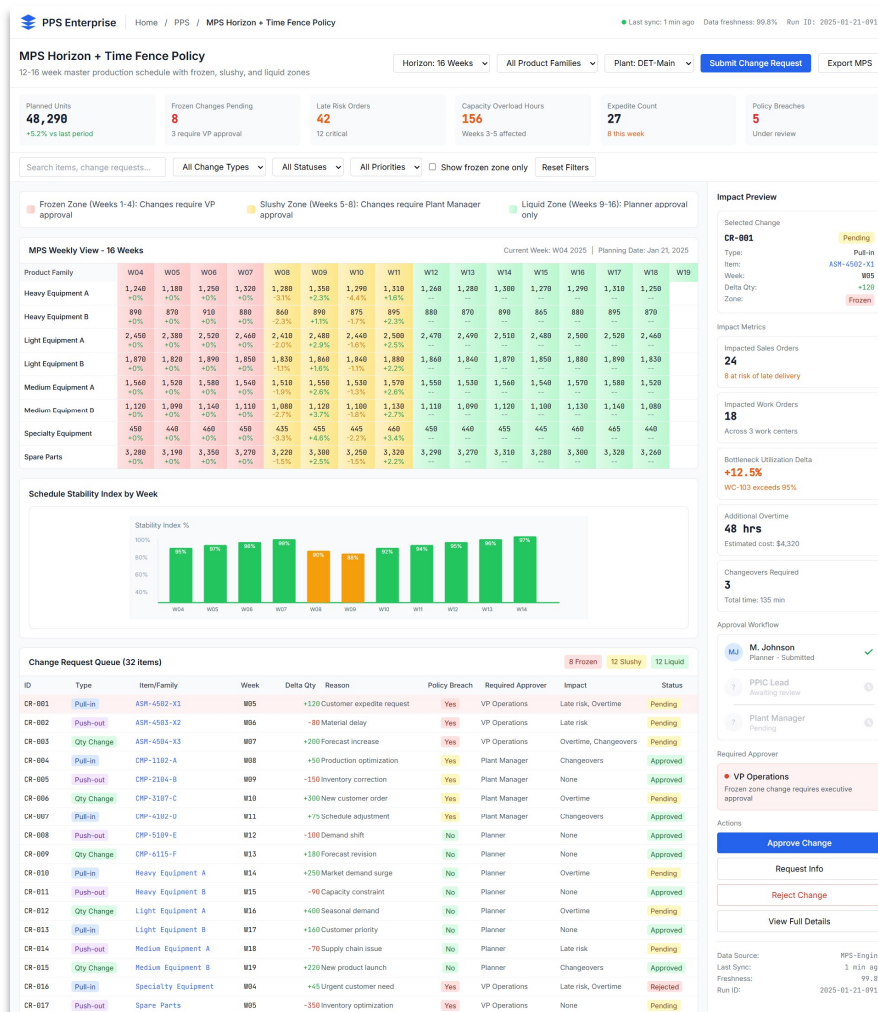
## MPS Stability and Time Fences

Rayterton PPS creates a time-phased master schedule across a defined horizon and applies time fence policies. The horizon can be split into zones, such as frozen, slushy, and free zones, based on your governance rules. Inside the frozen window, changes are not applied directly. They must be submitted as controlled change requests. Each request

enters an exception queue and includes an impact preview, such as the affected orders, shifted operations, and capacity load changes. The system records the reason, the requester, the approver, and the final decision so the change history remains consistent across teams. This supports stable near-term execution while still allowing controlled changes when required.

## Key controls

- Time fence enforcement with workflow approval for frozen-zone changes.
- Exception queue for requests that violate fence policies.
- Evidence pack that records what changed, who approved, and which orders were impacted.



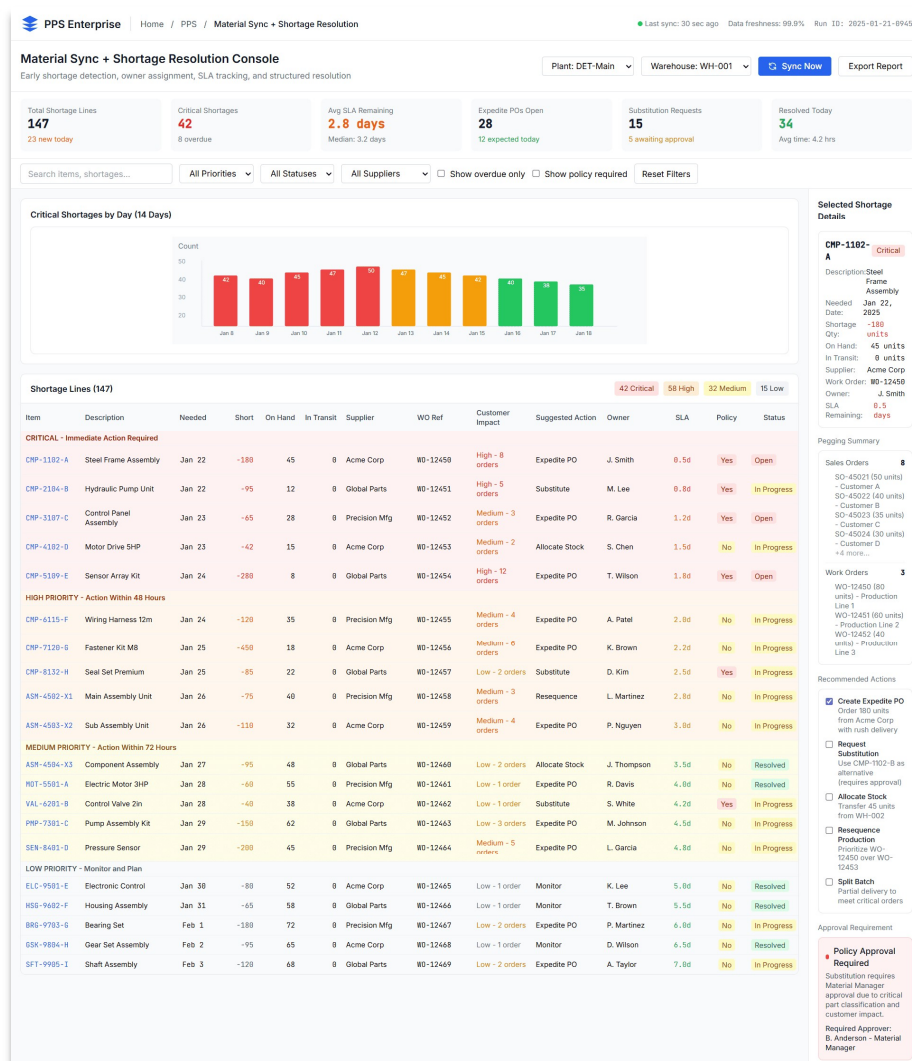
## Feasibility Gate: Materials and Constraints Synchronization

Before publishing a schedule, Rayterton PPS runs a feasibility check that synchronizes material availability and constraint policies. The system highlights shortages early, including which items, quantities, and dates are blocking feasibility. It provides structured

resolution actions such as substitute, split, expedite, or resequence, based on allowed rules and governance. For substitutions or priority changes that require control, the system enforces approvals and records the decision rationale. It also supports a shortage list with clear ownership, SLA, and a decision log, so follow-up actions are tracked. In addition, it provides WIP caps and constraint buffers that help maintain consistent constraint behavior in the model and in the resulting schedule.

## Key controls

- Shortage list with owner, SLA, and decision log.
- Rule-based shortage resolution with decision logging.
- Audit trail for constraint and capacity changes that affect commit dates.



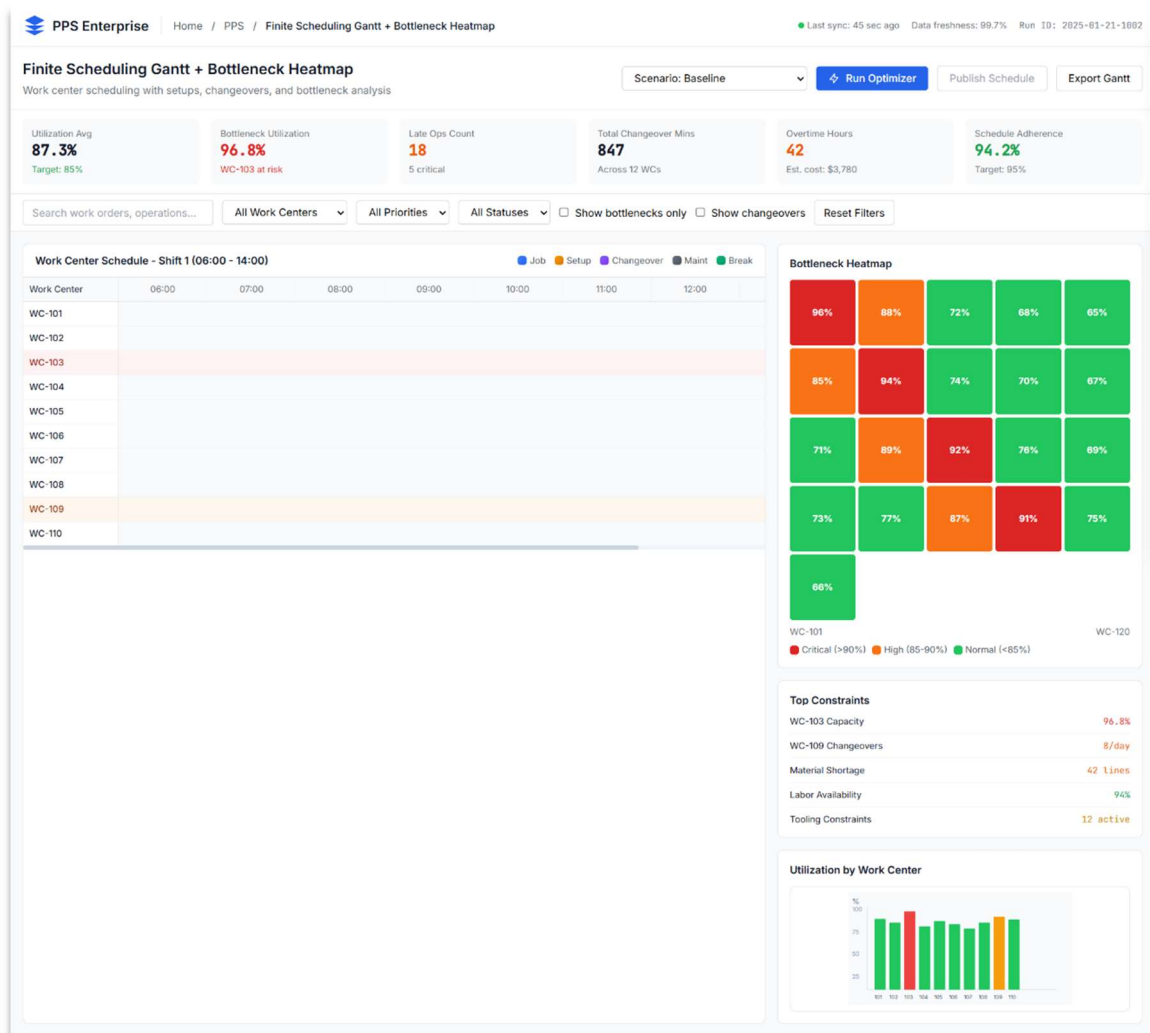
## Finite Capacity Scheduling and Optimization

Rayterton PPS runs finite capacity scheduling and sequencing at operation level. It uses real constraints such as work center capacity, calendars, maintenance windows, labor,

tooling, and changeover rules. The scheduling view supports Gantt visualization and drag and drop adjustments for rapid refinement. It can model setup and changeover blocks so planners can see the true impact of sequencing. Planners can simulate rules and compare scenarios before selecting a schedule version to publish. Scenario results can include measurable deltas, such as late orders count, overtime hours, utilization at bottlenecks, and total changeover minutes. The system stores the selected scenario and the reason for selection as part of the schedule version history.

## Key controls

- Gantt edits can be locked by time fence rules.
- Manual adjustments require a reason code and are logged.
- Scenario compare stores results and the selected version.

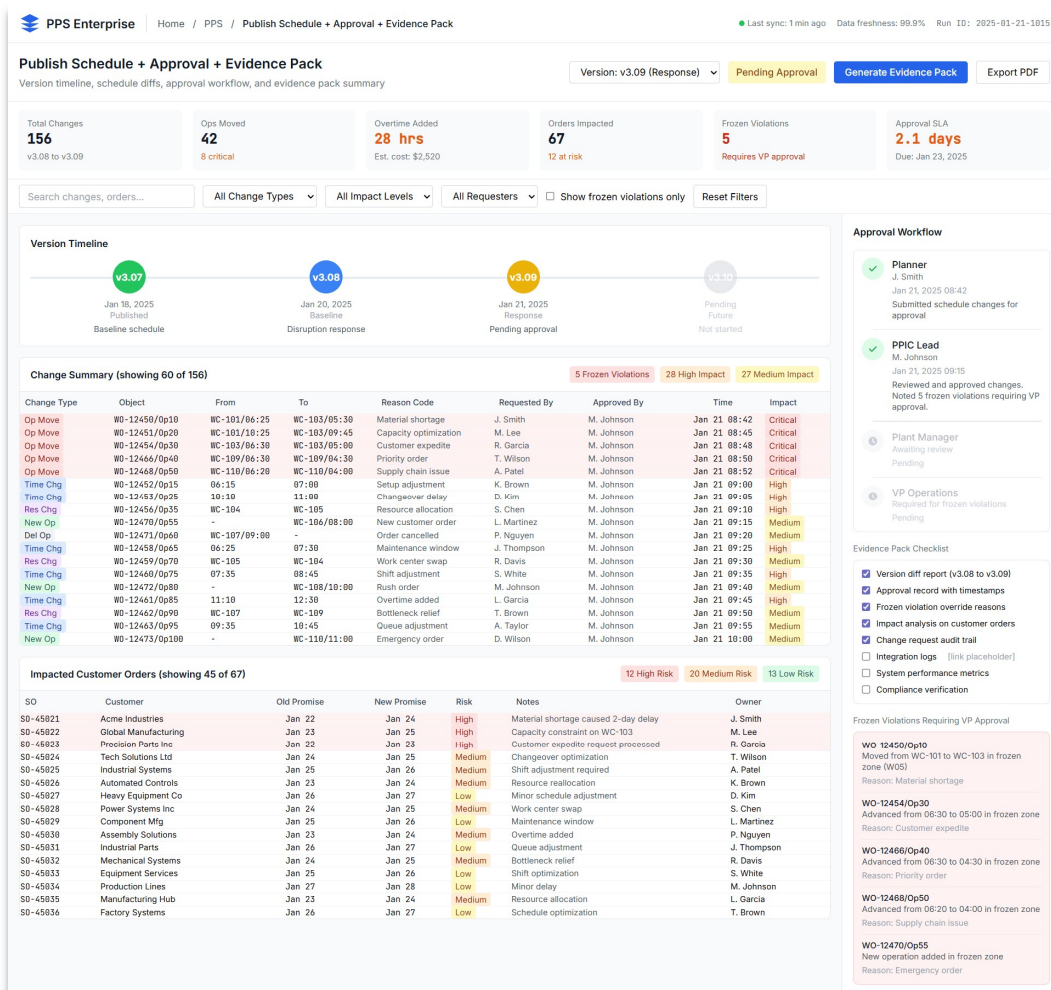


## Controlled Publishing and Closed-loop Execution

Rayterton PPS publishes schedules as controlled versions. Each version has a defined scope, such as plant, line, work center group, or horizon. Publishing requires approvals based on your governance rules and roles. The system produces a publish receipt that records the version, scope, approver, and release timestamp. During execution, dispatch sends the approved schedule to the shop floor or via an MES bridge. The system captures actual start and finish times, downtime reasons, and adherence signals. When actuals deviate from plan, exceptions are generated and can trigger replanning with a new version, while keeping full traceability between the published plan and the executed result.

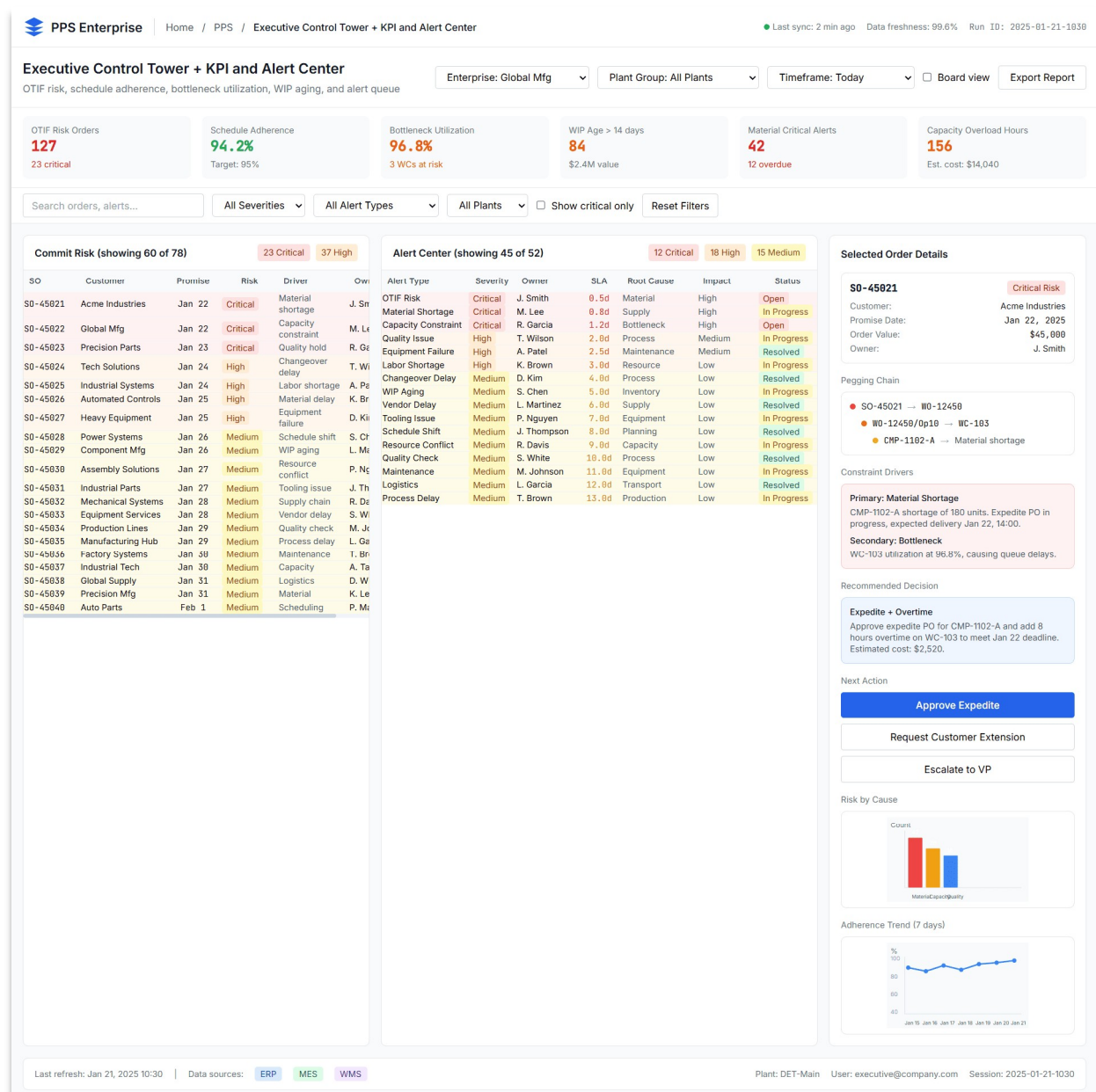
### Key controls

- Publish receipts include version, scope, approver, and release timestamp.
- Override requires a reason code and remains traceable to impacted orders.
- Closed-loop KPIs are recorded, including adherence, changeover variance, downtime causes, and late-risk trend.



## Executive Control Tower and Enterprise Platform

Rayterton PPS provides an executive view that consolidates promise risk, capacity risk, bottleneck utilization, WIP exposure, and exception queues. The dashboard includes an alert center with ownership and escalation trail, so each exception has a responsible user and an SLA. Users can drill down from an at-risk order to its pegged supply and to the operations that drive the promise date. The platform includes integration monitoring for ERP, MRP, MES, WMS, and BI, including logs, retries, and data sync timestamps. It also includes SSO, RBAC, approval matrix, and least-privilege access controls so schedule changes and governance actions remain protected and auditable.



## Glossary of terms & abbreviations

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- **ATP** = Available to Promise. Logic used to calculate promise dates based on material availability.
- **BI** = Business Intelligence. An external system integrated with the platform for data analysis and reporting.
- **BOM** = Bill of Materials. Scheduling master data that details the components, yields, and substitutions required for production.
- **BPI** = Business Process Improvement. A core area of expertise for Rayterton to enhance business operations.
- **CR** = Change Request. A formal request required to make changes to the schedule within the "frozen zone" or during maintenance.
- **CTP** = Capable to Promise. Logic used to calculate promise dates based on finite capacity constraints.
- **ERP** = Enterprise Resource Planning. A core business system that integrates with the PPS for data synchronization.
- **Feasibility Gate** = A process that synchronizes material availability and constraint policies to highlight shortages before publishing a schedule.
- **Finite Capacity Scheduling** = Scheduling that accounts for real constraints such as work center capacity, labor, tooling, and calendars.
- **Frozen Zone** = A specific period in the schedule horizon where changes are not applied directly but require a controlled change request.
- **Gantt** = A visualization tool used in the scheduling view to see and adjust the timeline of operations via drag and drop.
- **KPI** = Key Performance Indicator. Metrics used to measure performance, such as adherence, changeover variance, and downtime causes.
- **MES** = Manufacturing Execution System. A shop floor system that receives the approved schedule and provides execution feedback.
- **MPS** = Master Production Schedule. A time-phased schedule created across a defined horizon, governed by time fence policies.
- **MRP** = Material Requirements Planning. A system integrated with the platform to manage material needs.
- **Pegging** = Links maintained from demand to planned orders that allow users to trace which supply and operations support each commitment.
- **PPS** = Production Planning & Scheduling. The system managing the flow from demand intake to execution feedback.
- **RBAC** = Role-Based Access Control. Security controls that restrict system access and permissions based on authorized user roles.
- **SLA** = Service Level Agreement. A timeline standard used in shortage lists and alert centers to ensure accountability for decisions.

- **SSO** = Single Sign-On. An authentication method enabling users to access the platform with a single set of credentials.
- **Time Fences** = Policies that divide the planning horizon into zones (frozen, slushy, free) to control schedule stability.
- **WIP** = Work In Progress. Production inventory that has started but is not yet finished, monitored via caps and exposure risks.
- **WMS** = Warehouse Management System. An external system for managing inventory and warehouse operations that integrates with the platform.

**Stop negotiating with spreadsheets. Start running a schedule you can execute.**

Share your planning realities (plants, shifts, constraints, customer priorities) and we will configure a Rayterton PPS demo that mirrors your operational complexity and decision cadence. You will see feasible commitments, governed rescheduling, and closed-loop performance evidence in one flow.

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## About Rayterton

Established in 2003, Rayterton delivers comprehensive Best Fit Software Solutions, server and hardware products, and technology services to a wide range of industries and organizations. Our core expertise lies in Business Process Improvement (BPI), IT Infrastructure, and IT Management.

At Rayterton, we are committed to empowering our clients by enhancing their business operations through tailored IT and management solutions. We combine innovation, experience, and client collaboration to ensure long-term success and digital transformation.

## Our Competitive Strengths

**100% Risk Free**

**Best fit to  
client  
requirements**

**Easy to  
customize**

**Software  
ownership**

**No Change  
Request (CR)  
fees during  
maintenance**

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