



# BLENDING & MOVEMENT | BLEND PERFORMANCE MONITOR

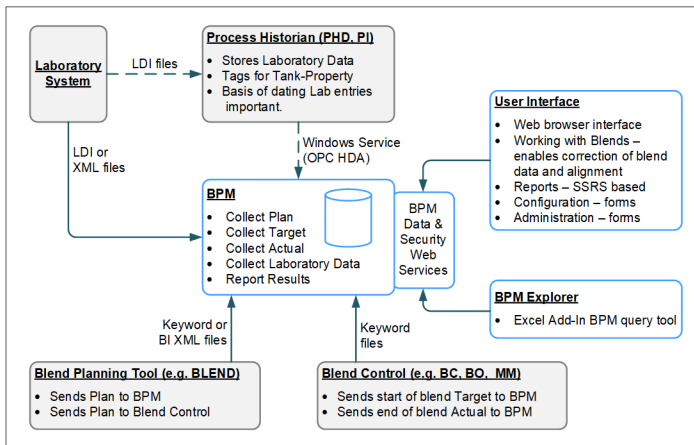
## PRODUCT INFORMATION NOTE

Honeywell’s Blend Performance Monitor (BPM) enables blend planning personnel to track the performance of blending operations to analyze and improve blending reliability and profitability.

### Key Capabilities

BPM collects data for each blending operation on the plan, target (starting conditions), actual results (including on-line analyzers and lab quality results) and associated re-blend operations to correct off-spec problems. It can be used with most blend planning tools, process historians, lab systems or blend control applications and has the following key capabilities:

- Blend Planning, Targets and Actuals Interfaces



**Blend Analysis Report** 09 August 2021

Specification	RG-1001	Started	2019-01-21 12:10:00	Shipped	40570.05
Sample	20190122113	Ended	2019-01-24 16:34:00	Blend Quantity	43224.31
Blender	MOGAS A	Duration (Hrs)	76.40	Head Quantity	166.62
Destination	T910	Blend Count	3	Header Quantity	43096.47
BPM Reference	1773	Reblended	True	Instalence	(20.90)

Type	Blend_Qty	Head_Qty	Header_Qty	Sample	Blend_#	Recipe	Started	Ended	Blender	Product	Specification
ACTUAL	43224.31	3583.14	40141.17	20190122113	4	Inta recipe PB1	1/22/2019 2:27 PM	1/24/2019 4:34 PM	MOGAS A	REG	RG-1001
ACTUAL	30979.79	2446.82	852.97		3	Inta recipe PB1	1/21/2019 4:54 PM	1/21/2019 9:10 PM	MOGAS A	REG	RG-1001
ACTUAL	2469.10	186.82	2202.28		2	Inta recipe PB1	1/21/2019 12:10 PM	1/21/2019 3:58 PM	MOGAS A	REG	RG-1001
PLAN	100.00	34.00			-1		1/21/2019 8:00 AM	1/22/2019 8:00 AM	MOGAS A	REG	Regular
TARGET	45100.00	100.00	45000.00		2	Inta recipe PB1	1/21/2019 12:10 PM	1/21/2019 3:58 PM	MOGAS A	REG	RG-1001

Name	Units	Initial Conditions				Actual				Lab Results		
		Heat	Plan	Target	Lo Limit	Value	H Limit	Lab	RBL1	RBL2	RBL3	
Density	%	0.00	0.75	0.00	0.00	0.00	0.00					0.00117
DI	mg F	1170.54	1052.87	1050.00	800.00	54.87	1220.00					1213
MOEN	O/N	85.64	84.38	81.00	81.00	85.71	120.00					85.7
ROAD	O/N	2.83	87.33	87.00	87.00	3.58	88.00					87.9
RON	O/N	82.29	80.29	80.00	81.00	82.22	120.00					85.1
PROPMTR	O/N											84.9
RVP	psi	6.17	6.38	13.50	5.00	6.20	13.50					12.9
T10	mg F	144.45	123.94	131.00	80.00	144.47	131.00					117
T30	mg F	210.32	178.97	180.00	170.00	210.36	230.00					227
T50	mg F	325.18	301.08	295.00	290.00	325.10	360.00					328
VAL20	mg F	118.53	124.44	131.00	100.00	118.77	140.00					

Component	Tank	Plan/Target (%)		Actual (%)		Header	Volume	Reblended Volume	RBL1	RBL2	RBL3
		Plan	Target	Lo Limit	Average						
ALYLIATE	T942	4.53	0.00	0.00	32.75	3000.00	750.00	0.00	0.00		
BUTANE	T940	3.91									
HeavyCarbontha	T944	60.00	60.00	0.00	25.67	3000.00	874.00	391.78	2434.70		
HY_CT_NAPH	T944	6.00									
HDOMERATE	T945	21.41									
LUPICORINATA	T941		40.00	0.00	42.15	3000.00	995.83	261.19	1008.47		
LT_STR_RUN	T946	1.70									
PERFORMATE	T947	42.54									

Component	Tank	Plan	Target	Actual	RBL1	RBL2	RBL3

### Benefits

- **Improved blending consistency** through identification, analysis and elimination of sources of blending variability
- **Reduced giveaway** of all blends by closing the gap between product specifications and product release limits
- **Component usage optimization** and subsequent improved profit through analysis of blending performance
- **Increased blending throughput** through tracking of historical Key Performance Indicators (KPIs) that can help identify constraints
- **Standard reports** which can be used to track, analyze and improve blending operation performance

- Lab Data Integration
- Standard Reports
- Custom Reports
- Excel Add-in to Drill-down and Analyze Blend Data

These key capabilities are described below.

## **Blend Planning, Targets and Actuals Interfaces**

Blend Performance Monitor has a set of interfaces that receive blending data via flat files and stores it in the BPM database tables. These interfaces enable data from various sources such as blend planning systems, blend controllers, etc. to be transferred to BPM for editing, merging, monitoring and analysis.

## **Lab Data Integration**

Blend Performance Monitor has an interface that receives lab data from flat files and stores it in the BPM database tables. Samples may be linked to blends automatically on receipt of the lab data or manually by the end user.

## **Standard Reports**

In addition to providing general reporting and data exchange functions, BPM provides the following standard reports:

- Blend Analysis Report
- Blend Giveaway Report
- Giveaway Summary Report
- Cycle Data Report

## **Custom Reports**

Blend Performance Monitor provides the capability to define additional custom reports. These reports are accessed via a Custom Report Explorer that is delivered as part of BPM.

## **BPM Explorer**

BPM Explorer is an Excel add-in that uses web services to connect to the BPM database. It enables a user to filter blends and select the desired information about those blends. A BPM Explorer request for blend information is called a Dataset and running it produces a spreadsheet with blends as rows and the data in columns. The request is configured as a Dataset on a hidden worksheet and is saved as part of the workbook. Saving the workbook saves the Dataset and it can be rerun later. Once data is extracted, it can be referenced in Excel charts and reports or used in other analysis.

## **Blend Performance Monitor DCS Support**

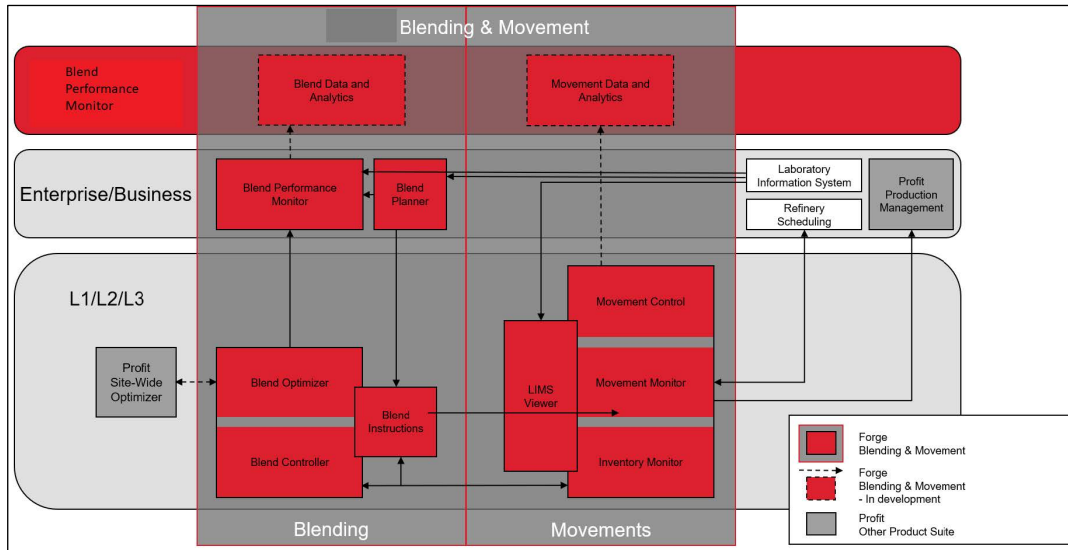
Blend Performance Monitor is a browser-based application that receives its information from various sources such as blend planning, blend control, or blend optimization applications that might have a dependency on a specific DCS platform. However, BPM does not have any direct dependency on a specific DCS and can support many DCS platforms as a result.

## **Integration with Honeywell Applications**

BPM uses the following integrated information:

- Blend planning data from Honeywell's BLEND or other blend planning tools
- Blend control results from Honeywell's Blend Controller (BC), Experion Blend Controller (EBC), Blend Optimizer (BO), or Movement Management (for batch blenders) or other blend control systems
- Lab data from various lab systems (Honeywell LIMS, SampleManager, etc.)

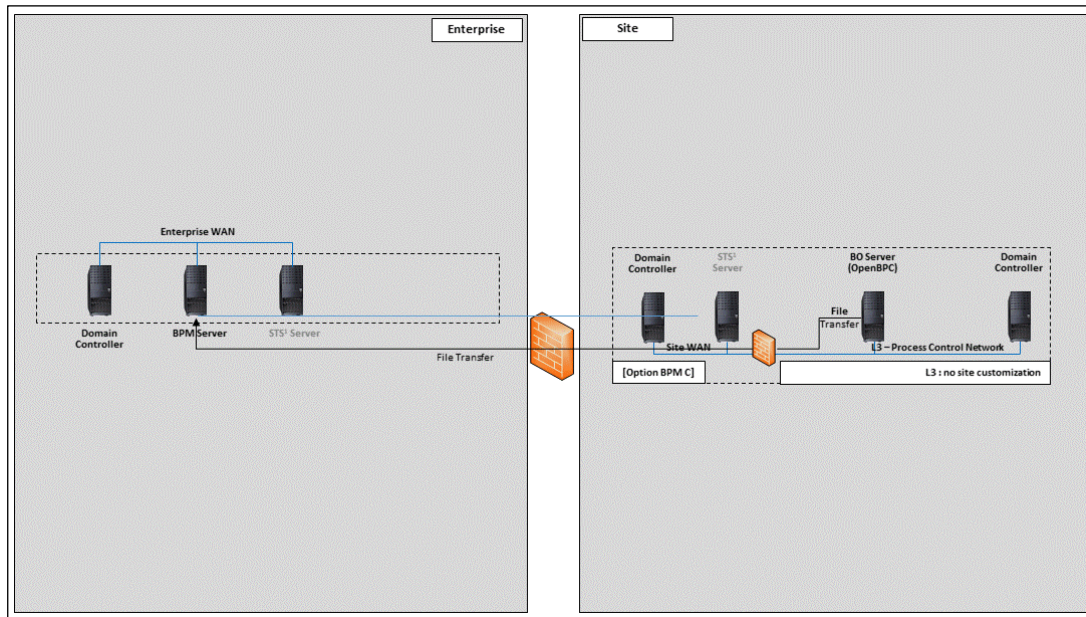
The relationships between Blend Performance Monitor, the Blending Suite (of which Blend Performance Monitor is a key component) and other Honeywell applications is shown in the following overview:



## System Requirements and Architecture

Blend Performance Monitor is installed on a BPM Server that runs Windows Server 2019 (64-bit) and SQL Server 2019 (64-bit). No special hardware is required to support the BPM Server, however network access between BPM and the desired data sources (i.e. Blend Planning System, Blend Control System and/or Lab System) needs to be provided.

BPM may be installed as a corporate application, capturing blend data for multiple refineries. (see below):



Alternatively, Blend Performance Monitor can be installed in the context of a combined Experion PKS and business information system at a specific site. In this case, there are no Enterprise components and the BPM Server is installed at the site.

## Training Services

Training courses addressing Blend Performance Monitor implementation, use and maintenance are available through Honeywell's Automation College ([www.automationcollege.com](http://www.automationcollege.com)). On-site courses are also offered upon request.

This document is a non-binding, confidential document that contains valuable proprietary and confidential information of Honeywell and must not be disclosed to any third party without our written agreement. It does not create any binding obligations on us to develop or sell any product, service or offering. Content provided herein cannot be altered or modified and must remain in the format as originally presented by Honeywell. Any descriptions of future product direction, intended updates or new or improved features or functions are intended for informational purposes only and are not binding commitments on us and the sale, development, release or timing of any such products, updates, features or functions is at our sole discretion.

All product screenshots shown in this document are for illustration purposes only; actual product may vary.

Honeywell® is a trademark of Honeywell International Inc. Other brand or product names are trademarks of their respective owners

## For More Information

Learn more about Honeywell's Blend Performance Monitor can improve the performance of your blending operations, visit [www.honeywellprocess.com/software](http://www.honeywellprocess.com/software) or contact your Honeywell Account Manager.

## Honeywell Connected Enterprise

715 Peachtree Street NE  
Atlanta, Georgia 3030  
[Honeywell](http://www.honeywell.com)

PN-02-23-ENG | february 23  
© 2023 Honeywell International Inc.

**Honeywell**