

ASX / Media Release

Pivotal Presentation to SEMICON West and CEO Summit

Fremont, California and Sydney, Australia; 10 July 2019 — Pivotal Systems Corporation ("Pivotal" or the "Company") (ASX: PVS) today has released the presentation to be given by Mr. John Hoffman, Chairman and CEO of Pivotal Systems at SEMICON West and at the 11th Annual CEO Summit held in conjunction with SEMICON West.

The presentation is Appended to this release.

- ENDS -

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About Pivotal Systems Corporation (ASX: PVS)

Pivotal Systems provides the best-in-class gas flow monitoring and control technology platform for the global semiconductor industry. The company's proprietary hardware and software utilizes advanced machine learning to enable preventative diagnostic capability resulting in an order of magnitude increase in fab productivity and capital efficiency for existing and future technology nodes. Pivotal Systems Corporation (ARBN 626 346 325), is a company incorporated in Delaware, USA, whose stockholders have limited liability.



SEMICON West 2019 / 11th Annual CEO Summit

July 10th 2019

John Hoffman- Chairman & CEO

(ASX: PVS)

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Financial data - All dollar values are in US dollars (US\$) unless as otherwise presented.

Non IFRS financial measures

Pivotal Systems uses certain measures to manage and report on its business that are not recognised under Australian Accounting Standards or IFRS. These measures are collectively referred to in this document as 'non-IFRS financial measures' under Regulatory Guide 230 'Disclosing non-IFRS financial information' published by the Australian Securities and Investments Commission (ASIC). Management uses these non-IFRS financial measures to evaluate the performance and profitability of the overall business. The principal non-IFRS financial measures that are referred to in this document is EBITDA. EBITDA is earnings before interest, tax, depreciation and amortisation and significant items. Management uses EBITDA to evaluate the operating performance of the business prior to the impact of significant items, the non-cash impact of depreciation and amortisation and interest and tax charges.

Although Pivotal Systems believes that these measures provide useful information about the financial performance of Pivotal Systems, they should be considered as supplements to the income statement measures that have been presented in accordance with the Australia Accounting Standards and IFRS and not as a replacement for them.

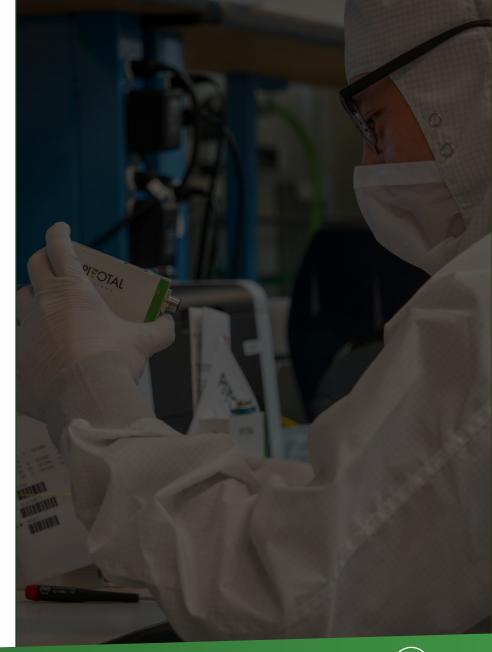


PIVOTAL SYSTEMS SNAPSHOT

Pivotal Systems (**Pivotal**) designs, develops, manufactures and sells high quality and performance gas-flow controllers for both device manufacturers and equipment companies participating in the semiconductor capital equipment market

ASX Ticker	PVS
GICS¹ Code	4530 (Semiconductor Equipment)
Share Price (as at July 5 th)	A\$1.30 / US\$0.91
52 week low / high	A\$1.135 / A\$3.45
Market Capitalisation ²	A\$144.8 / US\$101.6 million
Cash³ (No Debt)	US\$13.5 million
NTA per share ⁴	US\$0.20
Top 20 CDI ⁵ Shareholders	90.7%

*AUD/USD =0.7017



¹ GICS – Global Industry Classification Standard

² Based on Share price on July 5th, 2019

³ As at March 31st, 2019

⁴ As at December 31st, 2018

⁵ CDI – Chess Depository Interests

OVERVIEW



- Leading provider of innovative gas flow control solutions which are integral in the production of semiconductor devices (semiconductors)
- Pivotal's portfolio of gas flow controllers (GFCs) and Flow Ratio Controllers (FRCs) assist semiconductor manufacturers to stabilise and control the delivery of gases used to deposit or remove materials during the semiconductor manufacturing process



STRONG FINANCIAL PERFORMANCE POSITION

- Successful Initial Public Offering (IPO) on the ASX in July raising US\$39.6m (A\$53.5m)
- 2018 Revenue Growth of 32% to US\$20.3m (2017: US\$15.4m) as a result of increasing market share
- Statutory Gross Profit increased 106% to US\$6.1m (2017: US\$3.0m) with Gross Margin Expanding to 30.2%
- Cash balance of US\$17.5m at 31 December 2018 with no debt



POSITIONED WITHIN MULTIBILLION DOLLAR INDUSTRY

- The broader mass flow controller (MFC) market is forecast to grow to well above US\$1 billion by 2022
- Pivotal's customer base includes some of the largest integrated device manufacturers (IDMs) and original equipment manufacturers (OEMs)
- Opportunity for significant increase in customer penetration and expansion of overall market share

GFC PRODUCT PLATFORM

PIVOTAL DESIGNS AND MANUFACTURES
INNOVATIVE GFCS WHICH HELP IMPROVE
SEMICONDUCTOR MANUFACTURING YIELDS,
ALLEVIATE KEY PROCESS INEFFICIENCIES
WHILE INCREASING PRODUCTION OUTPUT.

Innovative hardware design eliminates need for supporting upstream or downstream machinery, alleviating additional costs.

Self calibration software – avoids the need for systems to ever come offline, saving valuable production time.

Highly intelligent software platform capable of providing ongoing updates and product improvements.



Highly accurate proprietary nanotechnology derived valve delivers industry leading accuracy.

Sensors able to monitor & control gas flows in real-time, every millisecond.

Built-in machine learning software capable of identifying changes in gas temperature and pressure as a process is being run.

Fastest turn on and turn off times in the industry – provides an increase in productivity for customers.



MARKET OPPORTUNITY

MARKET SIZE - \$1B¹
[CAGR 2017-2023, 5.4%]

Flow controller manufacturers

- Manufacturers of gas flow control devices
- Industry participants include:
 - Horiba, Ltd.
 - Brooks Instruments
 - Fujikin
 - Hitachi Metals
 - Pivotal Systems

Significant barriers to entry, driven by:

- Expense of Device Requalification at the IDM's
- Expense of IDM Requalification's by OEM's
- Customer Relationships and Joint Development Programs
- Intellectual Property Constraints
- Copy Exactly!



MARKET SIZE \$439B³

Original equipment manufacturers (OEMs)

- Designers and manufacturers of process tools used in the production of semiconductors
- Industry participants include:
 - Applied Materials
 - Lam Research
 - Tokyo Electron



Integrated device manufacturers (IDMs)

- Semiconductor and integrated device manufacturers
- A sample of industry participants include:
 - Samsung
 - Intel
 - TSMC
 - Texas Instruments
 - SK Hynix

Nota:

- 1. Market and Markets, November 2017. Includes etch, deposition and other markets.
- IC Insights, 2018 McClean Report.
- IC Insights, 2018 McClean Report.



Represents Pivotal's addressable customer base



REVIEW OF 2018

Pivotal's GFC qualifications at the OEM's performed to plan for the year. However, Pivotal did not meet prospectus forecasts, principally due to a slow down in capex spending by strategic memory IDMs. Pivotal Systems continued to win market share with both the Low Flow GFC and the High Flow GFC and is well positioned as the capex cycle recovers.

BUILT ON ESTABLISHED RELATIONSHIPS AND PENETRATED NEW CUSTOMERS

- Pivotal doubled its business with two device manufacturers (IDMs) and doubled its market share with two leading American process equipment companies (OEMs)
- 92% increase in number of customers that have validated the technology from 13 in 2017 to 25 at the end of 2018.
- Replicated leading market share with a second Korean IDM, and commenced shipments to two Taiwan-based IDMs

BACKLOG AND ORDERS DEMONSTRATE STRONG GROWTH TRAJECTORY

- Following the successful qualifications of leading IDMs, orders grew to US\$31.1m, up 101% from 2017, with US\$14.3m in backlog at 31 December 2018 to be converted to revenue in 2019
- Strong balance sheet with US\$17.5m cash and no debt

CONTINUED NEW
PRODUCT
DEVELOPMENT &
COMMERCIALISATION

- New High Flow GFC (released in 2017) has been qualified by leading IDMs and OEMs and gained repeat orders in 2018
- Introduced the Flow Ratio Control (released July 2018) product working in tandem with a leading Korean IDM
- Proved the superior performance of Pivotal's GFC product against Japanese competitors whilst working in conjunction with a leading Japanese Technical University and a Memory Device Manufacturer



CUSTOMER SEGMENTATION

BREADTH OF CUSTOMER VALIDATIONS DRIVES REPEAT ORDERING BEHAVIOUR

Total customer growth of 138% in 2018 versus prior year

Repeat customer growth of 127% in 2018

 12 additional customers who validated Pivotal's technology during 2018

 Selling, validation and development partnerships with blue chip IDMs and OEMs continued during 2018

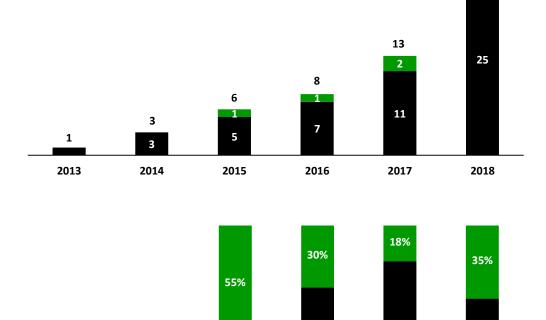


Several of the largest OEMs globally as customers

Retrofit orders to IDMs expanded market share in 2018

Revenue mix of 64.8% OEM and 35.2% IDM in 2018

 >85% of Pivotal sales have been used in etch process tools, remainder in deposition process tools



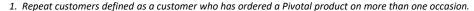
2016

OEM

2015

■ Customers in Evaluation

■ Repeat Customers



^{2.} Customers who are currently evaluating the Pivotal GFC Technology.



2018

2017

IDM

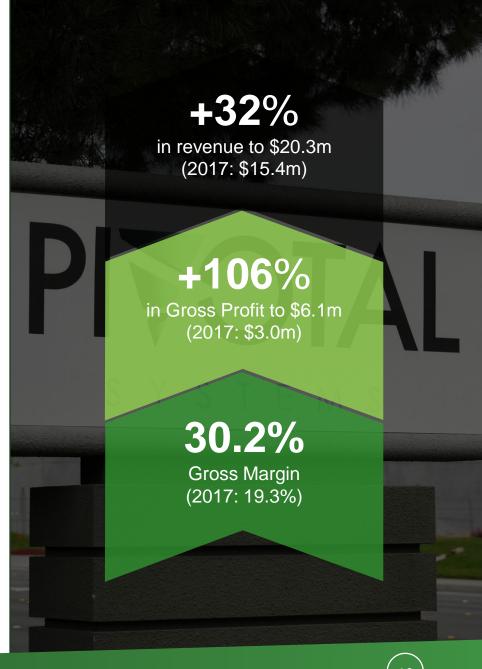
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FY2018 SUMMARY FINANCIAL RESULTS

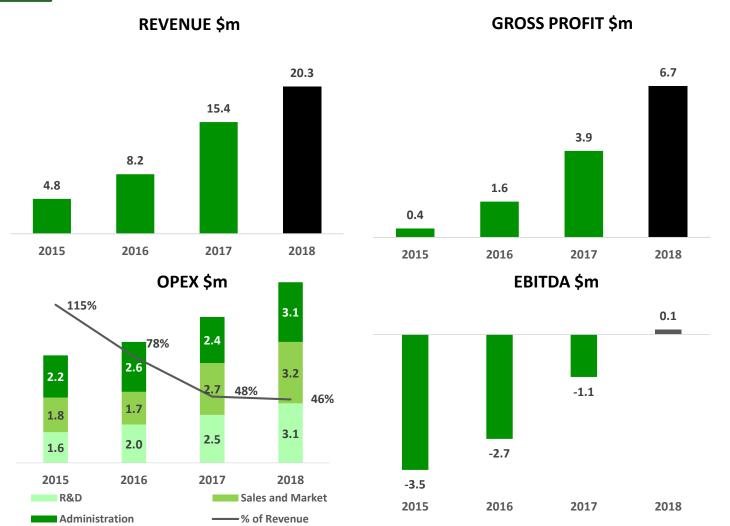
FINANCIAL INFORMATION Amounts in US\$m unless otherwise stated	2017 Statutory	2018 Statutory	% change	2017 Pro-forma ¹	2018 Pro-forma ¹	% change
Revenue	15.4	20.3	32%	15.4	20.3	32%
Gross profit	3.0	6.1	106%	3.9	6.7	75%
Gross margin	19.3%	30.2%		25.0%	33.2%	
Operating Expenses	(6.9)	(10.2)	48%	(7.5)	(9.5)	26%
EBIT	(3.9)	(4.1)	3%	(3.6)	(2.7)	-25%
EBITDA	(1.4)	(1.2)	nm	(1.1)	0.1	nm

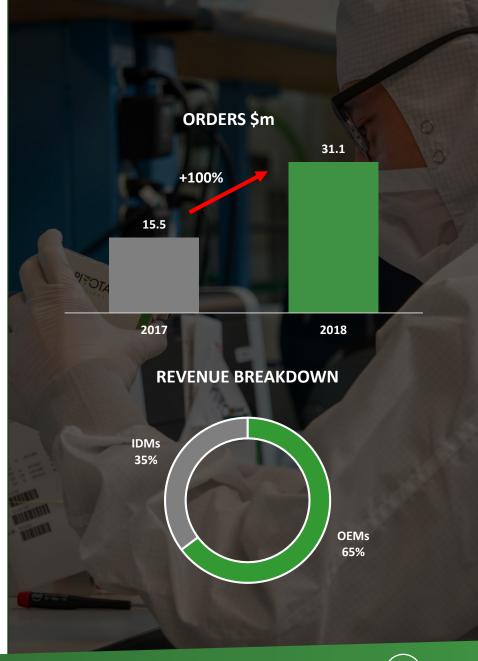
¹ Pro-forma adjustments include one-off adjustments to cost of goods sold, fair value remeasurement to preferred stock and warrants, IPO costs and the recognition of public company costs in 2017. nm – not measurable





KEY FINANCIAL METRICS (PRO-FORMA)







COMPANY TIMELINE

Management identifies a decade-long lack of innovation in gas flow control technology and begins research into GFCs, incorporating the gas flow monitoring technology developed to date

2011



2014



Pivotal awarded its second Global Red Herring Award

Leading US OEM qualifies High Flow GFC

100 WINNER

Leading Japanese

University Validates

Standard GFC

2016

2018

2003

Pivotal Systems
Corporation founded
to commercialise IP
development around
gas flow analysis and
monitoring and process
tool communication



The leading Korean IDM purchases first units to begin validation of the Pivotal technology in a production environment



2015

<u>=</u>

Inc. 500

Leading Asia-based OEM commences validation of Pivotal's technology.
Shipments of units to the leading US OEMs commence.
Pivotal awarded Red Herring 100 Award for North American and Global Companies categories and ranks 1st in Inc.500 for fastest growing U.S. Engineering companies.



2017

Continued validation of Pivotal's products by leading IDMs and OEMs.



Contracted integration facility in Korea

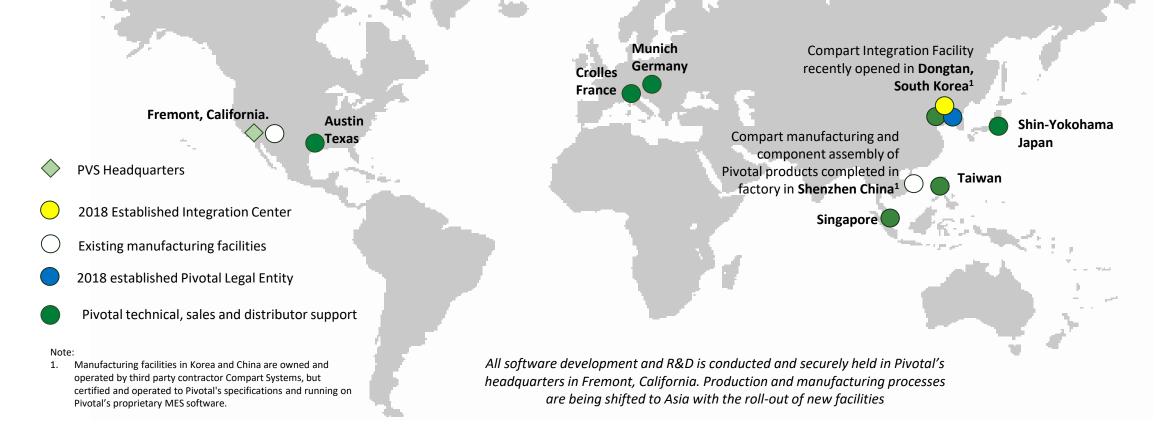
Capacity expanded to 5,000 units per month

Pivotal Awarded 3rd Red Herring Award for the High Flow GFC



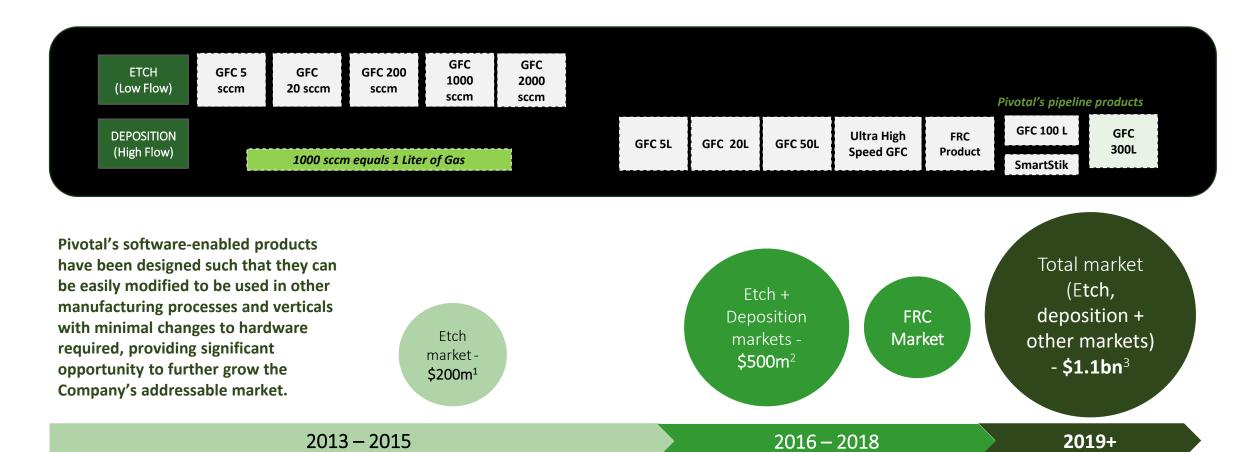
GLOBAL FOOTPRINT

PIVOTAL HAS A MANUFACTURING AND SALES AND TECHNICAL SUPPORT PRESENCE ACROSS THE US, EUROPE AND ASIA





HISTORY OF CONTINUOUS INNOVATION



Notes:

- 1. Market and Markets Nov-17 report estimates the market size for low flow controllers to be over \$200 million in 2017. Low flow controllers are primarily used in the Etching (Etch) application.
- 2. Market and Markets Nov-17 report estimates the market size for low and high flow controllers to be over \$500 million in 2017. High flow controllers are primarily used in the Deposition applications.
- 3. Market and Markets Nov-17 report estimates the total market size for flow controllers to be over \$1 billion in 2017. This includes the Etch, Deposition and flat panel LED applications.



INNOVATION DRIVES NEW MARKET OPPORTUNITIES



- Derivative of our core, proprietary high flow GFC currently under development
- Expected to materially enhance metal-organic chemical vapour deposition technique (MOCVD)
- This market is expected to grow from US\$542 million¹ to over US\$1.0 billion² over the next several years
- MOCVD used in the production of various optoelectronic and electronic equipment
- Development and testing per specific application expected to be 6-12 months



SOLAR PANELS



FLAT PANELS



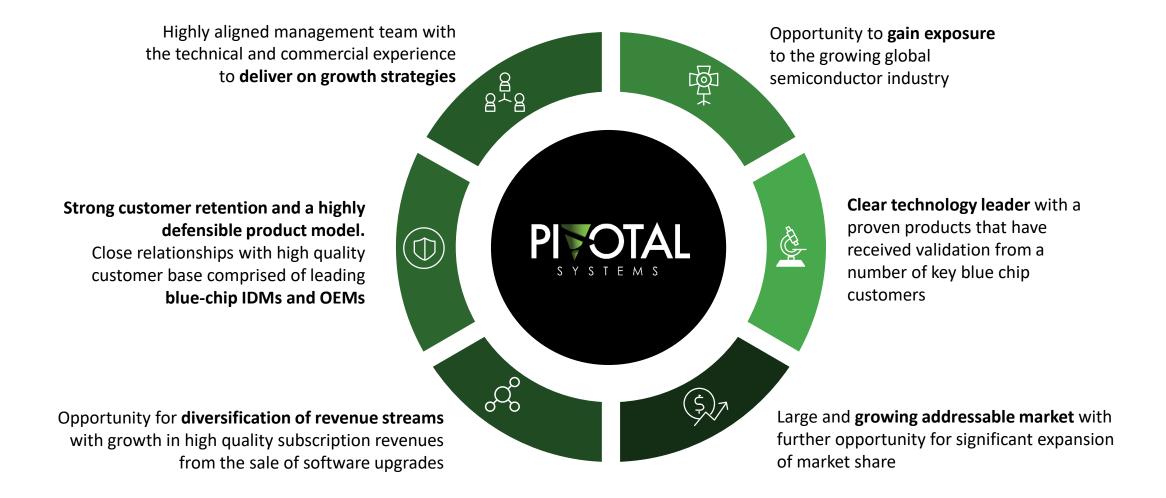
Increases total available market to over \$1 billion

- .. Market size estimate for flow controllers to the deposition and etch markets, Markets and Markets, November 2017.
- . Market size estimate for flow controllers to the deposition, etch, Metal-Organic deposition, solar, LED and flat panel markets, Market and Markets, November 2017.





PIVOTAL SUMMARY



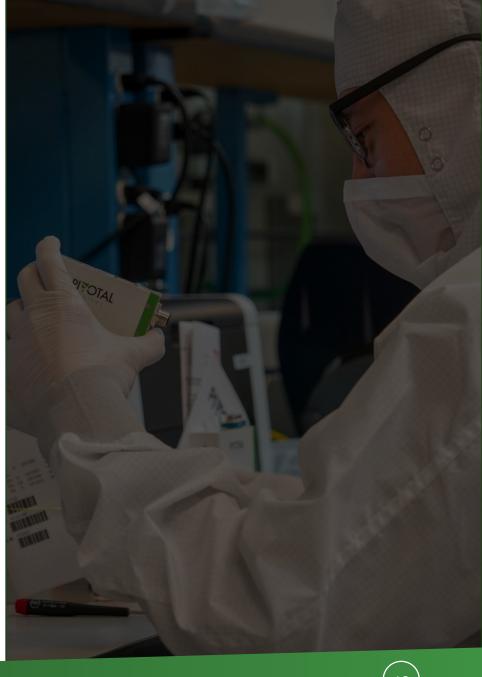
2019 OUTLOOK

SLOWED IDM CAPEX
SPEND FORCING OEMS
TO FOCUS ON
MANAGING
INVENTORY LEVELS

- OEMs are currently focused on managing their own inventory levels in light of the slowed IDM capex spend and are therefore deferring deliveries of components such as Pivotal GFCs
- Current expectation is for 1H 2019 revenue to be in the range of \$8-9 million with majority in Q2 (Q1 \$1.8m)

PIVOTAL EXPECTS 2H 2019 TO BE STRONGER THAN 1H 2019

- Based on feedback from customers around capex plans, together with Pivotal's increasing market share we currently expect 2H 2019 revenues to be significantly stronger than 1H 2019
- Pivotal will work to with its customers to assist them to maximise productivity and cost efficiency so that both the customers and Pivotal can emerge stronger, with the best technology, when the memory capex investment slowdown ends
- Pivotal maintains that its client-led product development focus will deliver significant future market share gains





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