April 2026

Data center valuations and potential disputes

"If you build it, he will come" is an oft-recited quote from the 1989 movie, *Field of Dreams*. In business contexts, the adapted refrain is, "If you build it, *they* will come," and interpreted to suggest that if you make an investment to build a business, people will come, consume goods or services, and pay you for them. The most salient example of this in 2025, and continuing through the first quarter of 2026, was the investment in the construction of data centers. The substantial, and anticipated, expansion of data center capacity has raised questions about the potential emergence of an artificial intelligence (AI) bubble. This growth has also generated considerable discussion regarding its impact on data center financing, as explored by CRA in the **first** and **second** installations of this series. Additionally, it has raised concerns about power availability, environmental impact, and broader societal implications.

In this *Insights*, we explore the relevant factors for valuing data center portfolios using a sample of data center asset-backed securitization transactions. We analyze the portfolio-level disclosures in presale reports issued by Standard & Poor's (S&P) Global Ratings that provide a "glimpse" into the characteristics of these data centers and their tenants. Gaining insights into the valuation and characteristics of data centers can be challenging because they are often financed by means, such as private credit or private capital, that require limited or no public disclosures. Exploring characteristics of data centers included in ABS transactions thus enables us to better understand how valuations and risk assessments may behave under stress and market adjustment, especially for owner-operators that lease capacity to numerous, diverse tenants and tend to access asset-backed securities (ABS) financing.[1] These considerations also inform our thinking on potential litigation risks, which may serve as the foundation for future disputes, a topic we examine in detail in the conclusion.

Our sample

We obtain presale reports for 42 private placement ABS issuances in 2020 through 2025.[2] In these presale reports, S&P provides a preliminary rating for the issuance and detailed disclosures to support its rating. Statistics summarizing the characteristics of the data centers and their tenants are available in 36 of 42 reports. In addition, the reports identify peer ABS issuances for comparison to the focal ABS

[1] We acknowledge that this approach to constructing our sample may induce a self-selection bias, as data centers financed by ABS issuance may not be fully representative of data centers financed by other means.

[2] Presale reports were obtained from https://www.spglobal.com/ratings/en.

issuance. We collect data center and tenant characteristic data for 12 peer ABS issuances, four of which are from 2019, to bring the total sample to 54 data center ABS issuances for our main analyses.[3]

Factors relevant to data center valuation

The presale reports include several data points, such as annualized adjusted base rent, appraised and liquidation values, occupancy rate, closing date debt service coverage ratio, and percent of investment grade tenants, that can provide insights into the values of data center portfolios. Table 1 provides descriptive statistics for valuation and capacity attributes of data centers in our sample of 54 ABS issuances.

Table 1: Valuation and capacity descriptive statistics

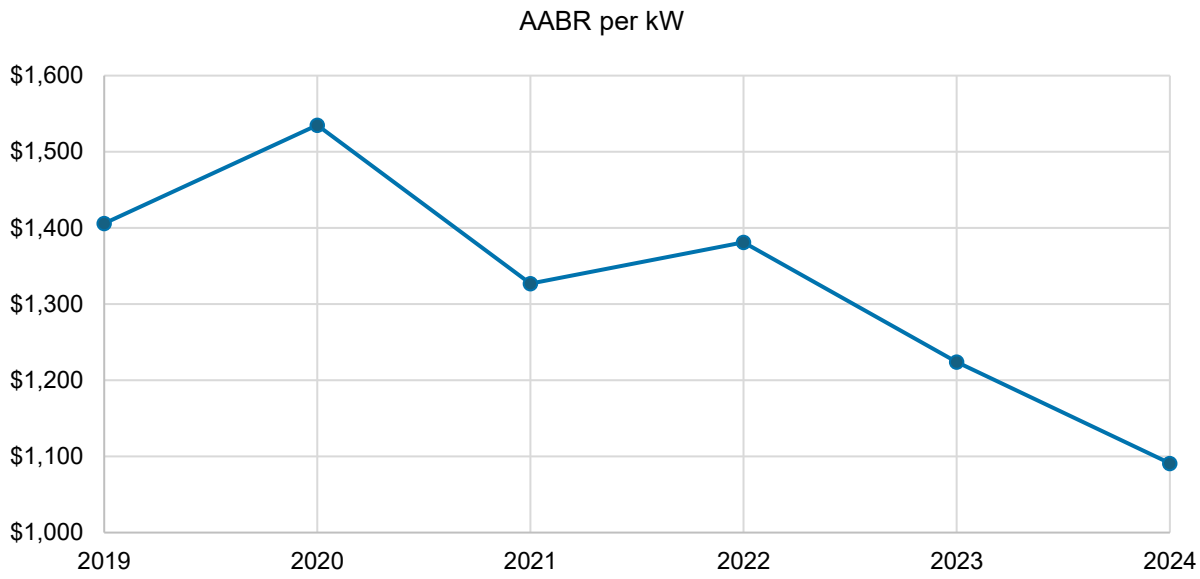
Measure	Mean	Std. Dev.	Q1	Median	Q3
AABR ($ millions)	$160	$82	$104	$141	$212
AABR per kW ($)	$1,251	$249	$1,077	$1,267	$1,445
Capacity (kW)	120,167	67,003	64,746	120,733	163,071
Leased (% of kW)	95.5%	6.6%	92.9%	97.9%	100.0%
Appraised Value ($ millions)	$2,242	$1,055	$1,460	$2,105	$2,777
Liquidation Value ($ millions)	$1,134	$551	$733	$1,138	$1,429
Debt Service Coverage Ratio	1.96	0.44	1.60	1.93	2.20

Annualized adjusted base rent

Annualized adjusted base rent (AABR) measures rental income generated from base rent on an annual basis and is informative of the portfolio's ability to generate revenue from tenants to recoup data center construction and operation expenditures. It can be useful for evaluating the strength of a portfolio's cash flows. The mean (median) AABR is $160 million ($141 million). The mean (median) AABR per kilowatt (kW), which is the AABR per leased capacity measured in kWs, is $1,251 ($1,267). AABR per kW is used to standardize and compare rental income across data center portfolios of varying sizes. The capacities of data center portfolios included in our sample average 120,167 kW and more than 95% (nearly 98%) of data center capacity is leased on average (at the median) at the time of ABS issuance. The figure below shows that the AABR per kW has decreased over our sample period, which is an expected response to a greater supply of data center capacity.

[3] We note that our analysis in this *Insights* is at the ABS issuance level because this is what credit rating agencies rate and offer to investors. A single data center property can have multiple tenant leases that are entered into at different points in time. As such, the same property may serve as collateral for more than one ABS. For example, the Aligned Data Centers Issuer LLC's series 2023-2 class A-2 issuance was the fourth in the master trust. It shares collateral with Aligned's series 2021-1, series 2022-1, and series 2023-1 notes. In this, and similar cases, statistics summarizing attributes of data center and tenant characteristics are measured at different points in time, potentially for the same underlying data center properties. S&P Global, "Presale: Aligned Data Centers Issuer LLC (Series 2023-2)," November 8, 2023.

Figure 1: Average AABR per kW by ABS Issuance Year



Appraised and liquidation values

Each ABS issuance discloses consolidated appraised and liquidation values for the data center portfolio. On average, the appraised and liquidation values are $2.24 billion and $1.13 billion, respectively. The appraised value reflects the data center's current market value on an in-use basis, as determined by an independent appraiser. The liquidation value is estimated by S&P based on its commercial real estate methodology and represents, as the name suggests, the amount an asset would receive if sold in a distressed situation. In general, there is little disclosure in presale reports about how these values are determined. For example, the presale reports generally do not provide enough detail to determine whether appraisals are primarily income-based, cost-based, market-based, or a mix of approaches.

Debt service coverage ratio

Another metric relevant to evaluating data center ABS is the closing date debt service coverage ratio (DSCR). DSCR provides a measure of the issuer's ability to cover its debt obligations with the data center's cash flows. A DSCR less (greater) than one suggests that the data centers are not generating (are generating more than) enough cash flows to cover the principal and interest payments. A DSCR equal to one indicates that the data center's cash flows will just cover payments, without any cushion for vacancies or increases in expenses. None of the ABS in our sample has a DSCR of one or lower. The average (median) DSCR is 1.96 (1.93), suggesting that the ABS issuers can fully cover their debt obligations.

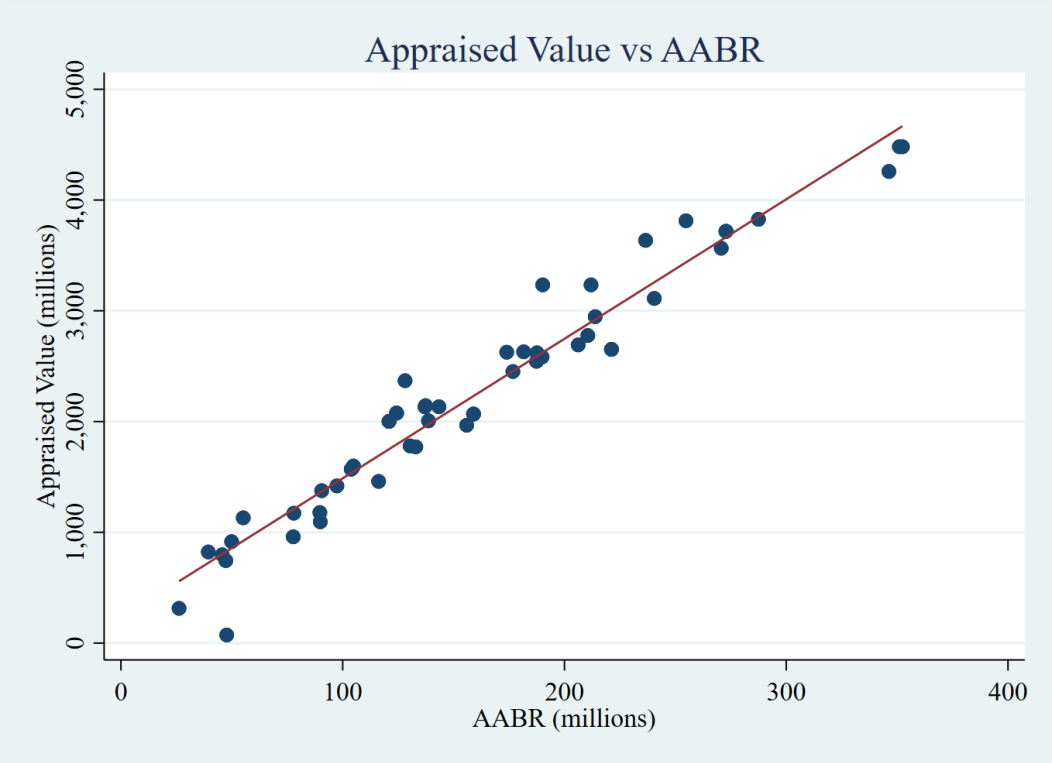
Most ABS in the sample include minimum thresholds for DSCR to protect investors. If the DSCR breaches the threshold amount, "cash traps" can be triggered, whereby excess cash is diverted to a cash reserve or rapid amortization and used to pay down debt. For example, the Aligned Series 2023-2 issuance, which has a DSCR of 2.56x, has a cash trap condition that occurs if the three-month average

DSCR is less than 2.00x. The CyrusOne 2025-1 issuance has a DSCR of 1.60 and the cash trap condition occurs if the three-month average DSCR is less than 1.35x.[4]

Relation between appraised value and AABR

A data center portfolio's appraised value is highly correlated with its income generating potential, as the correlation between AABR and appraised value is 0.974, indicating a near perfect linear relationship. Figure 2 plots this relation and includes a line of best fit. The plot confirms the strong, positive linear relationship, suggesting that AABR is perhaps the most critical determinant of appraised value.

Figure 2: Relation between appraised value and AABR



Given the importance of AABR to appraised values, unanticipated changes to AABR in the future could have profound effects on the appraisal value of a data center portfolio. We use multiple linear regression to identify determinants that explain the sources of variation in AABR.[5] Specifically, we analyze the relation between AABR and data center capacity, number of data centers, percent of investment grade tenants, number of tenants, and the percent of AABR from top 5 tenants. Table 2 presents the results.

[4] S&P Global, "Presale: Aligned Data Centers Issuer LLC (Series 2023-2)," November 8, 2023; and S&P Global, "Presale: CyrusOne Data Centers Issuer I LLC (Series 2025-1)," January 30, 2025.

[5] Larger data center portfolios, based on measures such as capacity, number of data centers, and number of tenants, are likely to have higher AABR. Thus, our model attempts to abstract the effect of size on AABR by positing AABR scaled by leased capacity as the dependent variable.

Data center portfolios with greater capacity are associated with lower AABR rates per kW, as providers may share benefits of scale with tenants. However, data center portfolios with more data center properties and tenants realize higher AABR per kW. Investment grade tenants and a higher concentration of leases among the top five tenants are associated with lower AABR per kW. Portfolios with data centers concentrated in California command premium rates. Overall, variation in data center portfolios' AABR per kW can be attributed to data center size, tenant concentration, tenant credit quality, and data center location. As we discuss in greater detail below, these factors also shape how cash flows, valuations, and risk assessments may evolve under stress, especially when the realized outcomes are different from the assumptions that underlie the disclosed metrics.

Table 2: Determinants of AABR per kW

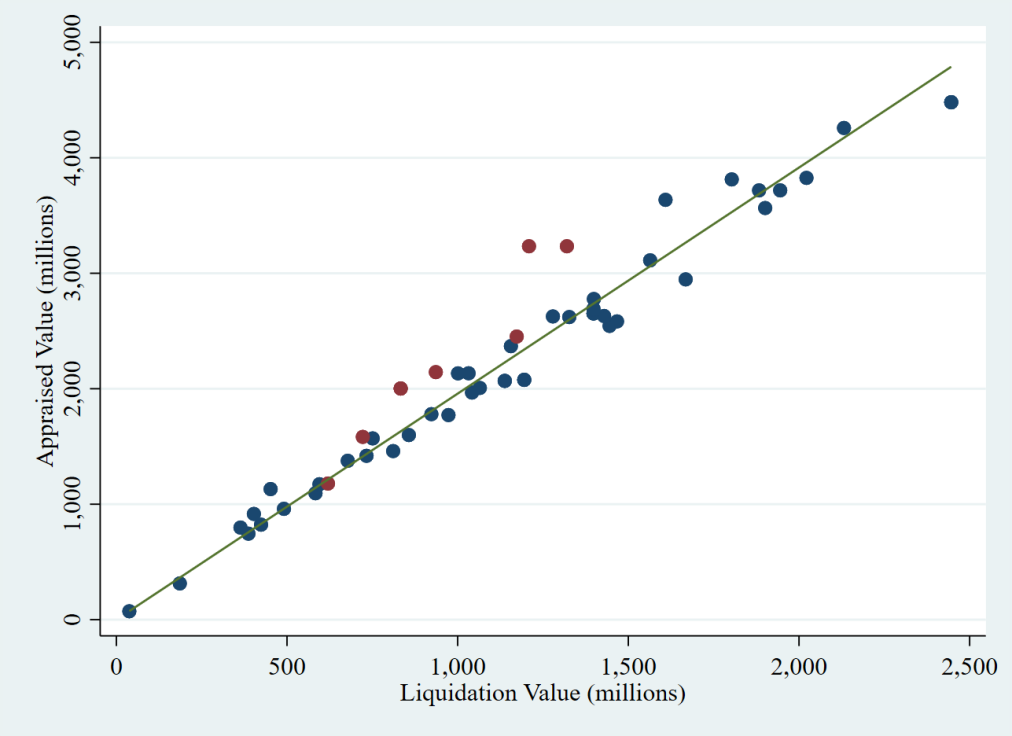
Dependent Variable: AABR / Capacity (kW)		
	Coefficient Estimates	
Independent Variables	**Sign**	**Significance**
Data center capacity (in kW, log-transformed)	Negative	***
Number of data centers	Positive	***
Percent of investment grade tenants	Negative	**
Number of tenants	Positive	*
Percent of AABR from top 5 tenants	Negative	***
Most data centers located in California	Positive	***
Constant	Positive	***
Observations	54	
R-squared	0.82	

"Positive" and "Negative" denote the variable's directional impact on the portfolio's AABR per kW. ***, **, and * denote that the coefficient estimate is statistically significant at a 1%, 5%, and 10% level of significance, respectively.

Relation between appraised value and liquidation value

There is also a strong relation between appraised value and liquidation value, as plotted in the figure below. The slope of the line of best fit included in the figure is approximately two, indicating that appraised value is twice that of the liquidation value, on average.

Figure 3: Appraised value vs. liquidation value



The relation between liquidation value and appraised value is not perfect, however, suggesting that other considerations influence S&P's determination of liquidation value. The maroon-colored dots in the figure above represent ABS issuances associated with data centers operated by the same data center operator. This operator's data center portfolios represent five of the six highest ratios of appraised value to liquidation value in our sample of ABS issuances. We examine the characteristics of this operator's data center portfolio in these ABS issuances to understand factors that may be associated with higher appraised values or lower liquidation values. There are a few characteristics about the data center operator's portfolio that stand out.

First, the data centers in the portfolio have many tenants. Only two data center operators in our sample have more than 65 tenants. One operator's ABS issuances in 2023, 2024, and 2025 disclose between 109 and 117 tenants – the largest in our sample. Thus, greater tenant diversification may contribute to higher appraised values relative to liquidation values.

Next, the weighted-average original lease terms for the focal data center operator range from 11.8 to 12.7 years, placing them near or in the upper quartile of our sample distribution. Longer lease terms are advantageous to data center operators because they lock in a stream of cash inflows for an extended period. However, they may prohibit operators from timely capitalization on market increases in lease rates.

Additionally, the data center portfolio has an average AABR per kW of nearly $1,520 compared to just over $1,205 for the rest of the sample. This higher revenue per unit of capacity suggests premium positioning or higher-quality facility offerings that increase appraised values.

Finally, the data center operator has strong debt service coverage. The average DSCR across its eight ABS issuances is 2.18, compared to 1.93 for other issuers. This higher DSCR provides a greater liquidity cushion that can reduce the likelihood of a forced sale under stress.

There are also a few noteworthy characteristics that work against the data center operator's higher appraised value to liquidation value ratios. Although the data centers have larger tenant bases, the percentage of investment grade tenants is relatively lower (73.4% vs. 84.6%). The data centers also have slightly lower occupancy rates at 91.4% versus 96.2% for the rest of our sample. Lastly, nearly all (99.5%) other data center capacity is characterized as turnkey, whereas only 81.6% of the focal operator's capacity is turnkey. The non-turnkey capacity is powered shell, which can transfer utility cost risk to tenants.

Potential disputes

Given the strong correlation between appraised values and AABR, disputes may arise over whether AABR inputs were representationally faithful at issuance and whether appraisers incorporated asset-specific risks in lieu of applying standardized heuristics. These disputes can be triggered by performance shortfalls, refinancing difficulties, or covenant violations, for example.[6]

Allegations: Material misstatements regarding appraised value basis, AABR sustainability, lease rates versus market, tenant concentration, lease terms and renewal assumptions, or re-leasing prospects.

Key evidence: Appraisal methodologies (income, cost, market, or hybrid approaches), cap rate selection, expense loads, AABR-to-value assumptions, and contemporaneous diligence records.

Expected analyses in these disputes: Reconstruct valuations using alternative modeling assumptions; benchmark key assumptions against contemporaneous market data; perform sensitivity analyses on LTV ratios, credit enhancements, and expected losses.

Many data center financings also carry project finance features: cash flows are effectively locked into a defined priority of payments (operating costs, taxes, reserves, debt service, and only then equity), with tight financial covenants and trigger mechanics. In that structure, operational disruption (e.g., reduced uptime) or regulatory disruption (e.g., permitting or power constraints) can cascade quickly into covenant breaches and cash traps that divert cash away from distributions. This can eliminate equity value even when the asset remains operable, and it tends to pull disputes toward questions of financeability, covenant mechanics, and what mitigation options were realistically available (e.g., waivers, restructurings, or lender step-in). CRA recently published a primer on these topics looking at **project finance for international arbitration practitioners**.

Below we outline other potential categories of disputes pertaining to data centers, data center portfolios, and financing transactions.

Liquidation, servicing, and workout

When liquidation values closely track appraised values, investors may treat these as implied benchmarks of downside exposure. Material deviations from expected recoveries could trigger disputes

[6] We acknowledge that disputes in this area have already been filed, including a securities class action case involving CoreWeave. *Masaitis v. CoreWeave, Inc.*, No. 2:26-cv-00355 (D.N.J. Jan. 12, 2026).

over servicer actions and waterfall mechanics. Potential triggers include DSCR breaches, reserve draws, cash trapping events, and collateral transactions.

Allegations: Failure to follow cash waterfall, inappropriate expense allocations, unreasonable servicing discretion, conflicts between senior and subordinate noteholders.

Key evidence: Trigger calculations and inputs, expense and capital classifications, workout and sale rationales, marketing and bid documentation, and valuation materials.

Expected analyses in these disputes: Replicate waterfall and re-run under disputed assumptions to clarify divergent outcomes across tranches, including interest shortfalls, principal write-downs, and loss allocations.

Tenant performance and facility delivery

Lease disputes directly erode AABR. Given the link between AABR and valuation, localized tenant events can create valuation pressure and covenant stress, especially in concentrated portfolios. Beyond outages and missed power commitments, disputes may center on agreements (often service level agreements, or SLAs) that define measurable uptime and security obligations and specify credits or other remedies if performance falls below a threshold. These disputes can be triggered, for example, by tenant distress, nonpayment, outages, missed power commitments, or expansion delays.

Allegations: Breach of service obligations (power, cooling, connectivity, uptime), failure to deliver contracted capacity or improvements, disputed application of threshold measurement rules of downtime, improper cost allocations (including water and energy costs), disputes over cure rights, termination rights, or force majeure.

Key evidence and analysis: Lease terms and SLA exhibits, service level provisions, incident logs and monitoring data, outage reports, utility records, billing and pass-through calculations, communications regarding expansions, and remedies.

Expected analyses in these disputes: Establish links between operational events to resulting financial impacts by quantifying disruption effects, including timing and magnitude of missed rent, reimbursements, and incremental costs; apply lease-specific mechanics (pass-through formulas, escalation clauses, service-level credits) rather than generic assumptions. Apply to the contract's measurement rules (e.g., uptime definitions, thresholds) to test whether a breach occurred and what remedies follow.

Ratings, diligence, and reliance

Our findings explain how ABS ratings can diverge from tenant credit profiles due to structural features and standardized inputs. These same patterns can support potential claims that deals were appropriately engineered for tail risk or that sensitivities were inadequately disclosed. Downgrades, rating watch placements, or performance that proves to be inconsistent with investor expectations may all cause disputes.

Allegations: Insufficient stress disclosure, inadequate diligence, excessive tenant concentration, mischaracterization of rating specifications.

Key evidence: Rating rationales in presale materials, disclosed stress scenarios and mitigants, investor diligence files, contemporaneous communications on tenant quality, concentration, and renewal risk.

Expected analyses in these disputes: Map disclosed scenarios to cash flow and loss outcomes; compare realized outcomes to ex-ante scenario ranges; and apportion losses between deal structure/waterfall mechanics versus tenant performance/market conditions.

Regulation, permitting, and power procurement

Regulatory and power constraints can impair lease-up and renewals, affecting AABR and valuation. Disputes can arise if these risks were not adequately disclosed and incorporated into underwriting. Parties can also end up in disputes with state or local governments due to incentive programs (e.g., tax abatements, grants), policy shifts, licensing delays, or other governmental conduct that changes the project's economics after capital was committed. Also, permitting delays or denials, interconnection constraints, utility tariff changes, water or energy cost hikes, power availability issues, environmental compliance costs, or community opposition all lead to disputes.

Allegations: Breach of development and financing covenants, misstatements about permitting status or power and water availability, disputes over PPA allocations, pricing, or performance.

Key evidence: Permitting and interconnection timelines, representations in offering materials, incentive agreements, power procurement terms, utility correspondence, capacity delivery forecasts, and operating cost pass-through projections.

Expected analyses in these disputes: Establish foreseeability of constraints and quality of disclosure; quantify impact of delays or policy changes on lease commencement, occupancy, AABR, operating expenses, and cost pass-through; and assess valuation impact of curtailed capacity.

Conclusions

In the first part of this *Insights* series, we discussed the growth of investments in data centers and the role of ABS as source of financing that is beneficial to issuers. In the second part of the *Insights* series, we discussed how credit rating agencies adapted their rating methodology to account for data center idiosyncrasies. In this third part of the *Insights* series, we analyze the characteristics of the data centers in ABS portfolios, with a focus on factors relevant to valuation. Our *Insights* collectively inform thinking on potential litigation risks, which may serve as the foundations for future disputes. CRA brings deep expertise to a broad range of client challenges and remains at the forefront of the issues shaping tomorrow.

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