

# IBM FlashWatch FAQ

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# What is IBM FlashWatch?

***It's the confidence to purchase, own and upgrade your IBM Storage***

## ***Acquisition***

### **High Availability Guarantee**

Proven 99.9999% availability  
Optional 100% commitment when  
using HyperSwap

### **Data Reduction Guarantee**

2:1 self-certified  
Up to 5:1 with workload profiling

### **All-inclusive Licensing**

All storage function included in licensing  
cost for internal storage

## ***Operation***

### **Comprehensive Care**

Up to 7 years of 24x7 support, with 3 years  
Technical Advisor, enhanced response times  
and managed code upgrades

### **Cloud Analytics**

Storage Insights included at no extra cost to  
proactively manage your environment

### **Flash Endurance Guarantee**

Flash media is covered for all workloads  
whilst under warranty or maintenance

## ***Migration***

### **IBM Flash Momentum**

#### ***Storage Upgrade Program***

Replace your controller *and* storage every 3  
years with full flexibility

### **Cloud-like Pricing**

Storage Utility pricing has monthly payments  
for just the storage you use

### **No Cost Migration**

90 days no-cost data migration from over  
500 storage controllers, IBM and non-IBM

*Replaces all previous "Controller Upgrade", "Peace of Mind" and "FlashWatch" Programs commencing with purchases made on or after **February 11<sup>th</sup> 2020**  
Program applicability varies by product. Check "FlashWatch Product Matrix"*

# Acquisition | High Availability Guarantee

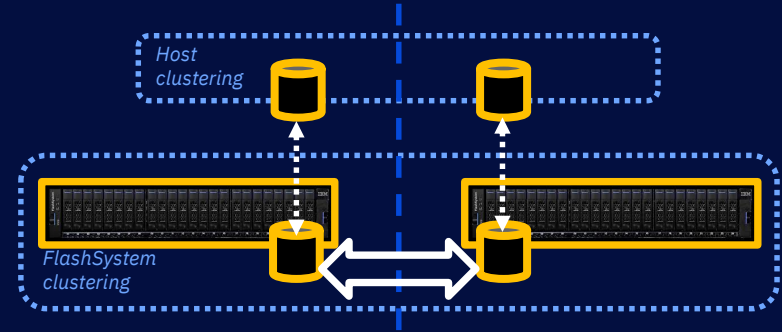
## What?

*The reassurance that you'll be able to access your data, when you need to*

Robust Spectrum Virtualize software has a measured availability of **99.9999%**. This represents an average of just **30 seconds** per system, per year down time

With the use of a high availability Hyperswap configuration, IBM will commit to **100%** availability to your data - **that's zero interruption to your data access** - for a 3 year period!

## How?



Using two FlashSystem controllers, HyperSwap presents a synchronised view across two sites

Complementing host clustering, loss of access to one site no longer means loss of access to your data

The guarantee is underwritten by IBM Lab Services who will set up the environment to adhere to all best practices. If remediation is required at any point in the future, IBM Lab Services will perform the work at no additional cost.

# Acquisition | Data Reduction Guarantee

## *What?*

*You need your storage to deliver the level of data reduction that you expected when you purchased the product*

IBM offers a **2:1 self-certified** data reduction guarantee to demonstrate the data reduction technology you're relying on is working in your environment

If you want further peace of mind then IBM will work with you to analyse your workloads and will offer a guarantee of up to **5:1**

## *How?*

For the 2:1 data reduction contract the customer will need to self-certify that the data they're writing is able to be reduced (e.g. not encrypted, not already compressed)

IBM also offers a 5:1 data reduction contract where the customer must run Comprestimator and/or DRET tools. IBM will analyze the tooling output and will commit to a data reduction ratio of up to 5:1

In both cases, the remedy is that IBM will provide additional physical capacity up to a committed level.

# Acquisition | All-Inclusive Licensing

## *What?*

*Spend your storage admin resource on managing your data, not managing your license entitlement*

Current FlashSystem products include all-inclusive software feature licensing. This allows you to use all of the richness of Spectrum Virtualize with all of the capacity purchased with your product

If you want to extend the Spectrum Virtualize value to externally virtualized storage, then this can be done on a capacity basis

## *How?*

If you're not using external virtualization or encryption, there's nothing more you need to do!

The all-inclusive software feature licenses are included with the purchase of the product.

Encryption is excluded from the all-inclusive license because it's not available worldwide and is a separate orderable feature, limited by geo.

If you're using external virtualization, review the product sales manual for which license to purchase

# Operation | Comprehensive Care



## Technical Advisors

Proactively improve problem management and communication

Operation support



## IBM Service Support Representatives

Onsite product setup and installation

Remote installation of six software updates during 3 year warranty period



## Enhanced Response Times

For severity 1 problems, response objective is within 30 minutes

*"Enterprise Class Support" (ECS) comprising of these three components is bundled with 9848 and 2147 3 year warranty models and is available during the warranty period. Alternative services are available on other IBM FlashSystem products. Standard warranty response times vary by product from 9x5 next business day thru to 24x7 ECS. See [here](#) for more details on warranty by model.*

## What?

*Let IBM help you monitor your environment and warn you when something needs attention*

Storage Insights (SI) provides a single pane of glass for you to monitor your storage estate

## How?

Sign up for SI and install the software included as part of your FlashSystem purchase

**IBM Support**  
Faster time-to-resolution  
Remote diagnostics  
Configuration best practices  
Environment analytics  
Predictive analytics



**Storage Admin**  
Health, performance & capacity monitoring  
Problem and risk notification  
Simplified ticketing  
*Performance troubleshooting*

**Planning**  
*Capacity planning*  
*Performance planning*  
*Consumption planning*  
*Data placement optimization*  
*Customized alerting*



*Storage Insights Pro paid-for-features shown in italics, also included with Spectrum Control license*

# Operation | Flash Endurance Guarantee

## *What?*

*Remove the worry of wearing out your Flash media*

Flash media has a finite lifetime, a finite number of times that you can write to it. Once a Flash module has worn out, it needs replacing

IBM FlashCore Modules use some clever algorithms to prolong Flash memory, along with some fine grain isolation around worn or failed memory. This maximises time-to-failure for each module and reduces likelihood of a RAID rebuild

Regardless, *ALL* failing Flash media will be replaced whilst you're under warranty or HWMA

## *How?*

1 year Machine Type products (e.g. 9846) will come with a year of warranty. 3 year Machine Types (e.g. 9848) will come with an additional 2 years HWMA (ie a Hardware Maintenance contract)

After the warranty or HWMA has expired, renew your HWMA to ensure your FlashSystem product is covered for all hardware failure. *This will include replacing Flash media, regardless of why the media has failed*



# Migration | IBM Flash Momentum Storage Upgrade Program

## What?

Maintain control over your environment with a fully flexible offering that refreshes your storage *and* controller with no lock in

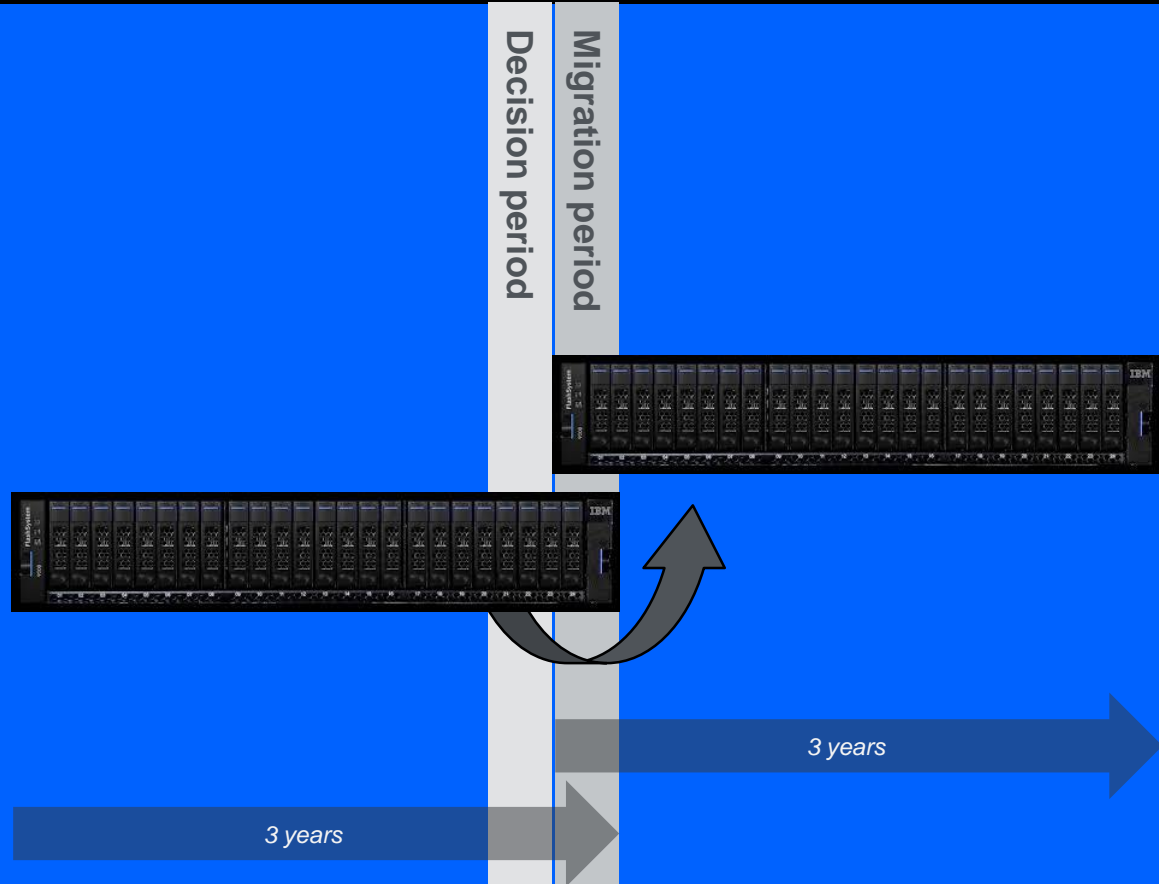
Finance a FlashSystem over a 3 year term

Just before 3 years, *you decide* whether to **keep** your FlashSystem, **refresh** or simply **walk away**

Refresh your FlashSystem for the **same monthly price or less**, or up/down size your system to meet your needs

3 month period of transition with no *dual billing*

*Also available with cloud-like pricing*



# Migration | IBM Flash Momentum Storage Upgrade Program

## *How?*

Configure your product and contact IBM Global Finance (IGF) to arrange financing and start the first 3 year term

At around 2.5 years, decide if you want to keep the product, replace the controller *and* storage, or simply return the product and walk away

If you replace the product, IBM will provide an 'equivalent' system for which you'll pay the same monthly price or less

- *'Equivalent' system means a current or next-gen model with CPU, memory, IO cards, storage capacity and expansion enclosures that are either identical or comparable to your current product*
- *Subject to a fair market lease from IBM Global Financing, product availability, client credit approval, changes in any of the following: interest rates, currency, tax rates, market conditions, legislation and IBM policy*
- *This price promise only covers products (MTMs along with any licensed software required for those MTMs) listed in the "FlashWatch Product Matrix". It does not include external virtualization licensing, or other hardware or software products that may have been included in the lease*

If you want a different product or configuration - either bigger or smaller - you'll still get a 3 month migration period and you can lock in a new monthly price based on the new product across 2 terms

No problems upgrading your storage during a 3 year term (extra storage, cache, etc) – the monthly price just increases for remainder of term. At the end of the term you can choose a new product and lock in a new monthly price across 2 terms

# Migration | Cloud-like Pricing

## What?

*Don't pay for capacity up front, pay for capacity when you use it*

Entire capacity is installed on day 1, but you're billed based on just what you use monthly.

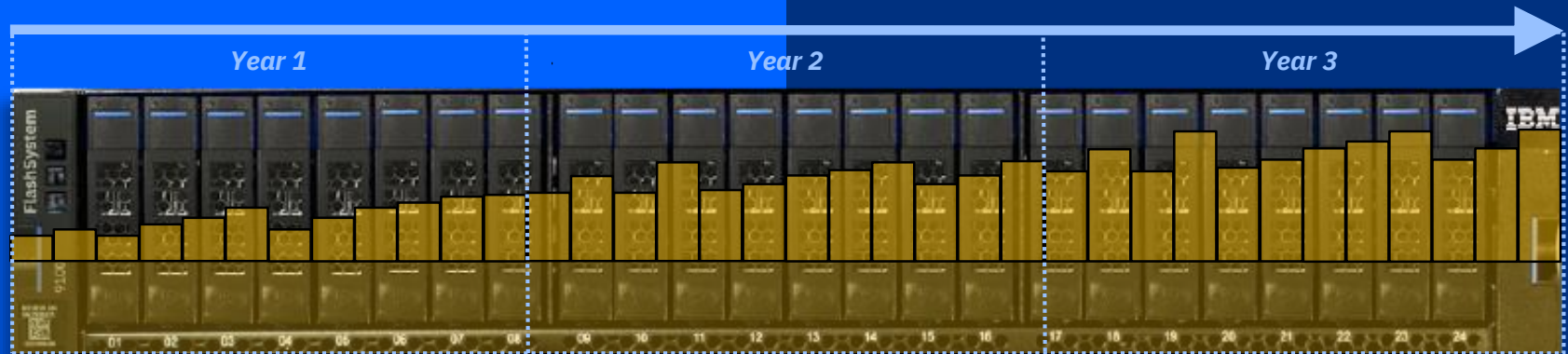
**No disruption** when you need to grow, and no overspend on storage you're not using

## How?

Order in econfig as the 9848-UG8, 2076-U7C and 2078-UHB Storage Utility models.

Payment consists of **fixed costs** (usually 30-40%), and **flexible** portion, billed quarterly

Use Storage Insights used to monitor environment and measure monthly capacity usage



# Migration | No Cost Migration

## *What?*

*It shouldn't cost you extra money to migrate your data onto your new storage controller*

For a **90** day period, from the date of installation, you can migrate data to your FlashSystem product using an approach of your choice, without having to pay any additional external licensing

- ✓ Migration through **Virtualization** with the virtualization of over 500 different storage controllers from multiple vendors
- ✓ Migration through **Copy Services** or **Volume Mirroring** with another Spectrum Virtualize product
- ✓ **Host based** migration

## *How?*

Just do it! There's no need to let IBM know

TEMPORARILY uplift the licensing within the GUI to the required amount to allow you to migrate

If you need help with the migration, you can pay IBM Lab Services or a Business Partner to do this

When you've finished, return the licensing to the licensed level

If you're audited during the migration period, quote the FlashWatch No Cost Migration program

# IBM FlashWatch Product Matrix

|  | SVC  | FlashSystem 5000/H  | FlashSystem 5100/H  | FlashSystem 7200/H                      | FlashSystem 9200                                | FlashSystem 9200R                               |
|--|--|---|---|---|---|---|
| <b>HA Guarantee using HyperSwap</b>  | Yes  | 5030 Only   | Yes   | Yes                                     | Yes   | Yes   |
| <b>Data Reduction Guarantee</b>  |  | 5030 Only   | Yes   | Yes                                     | Yes   | Yes   |
| <b>All-inclusive Licensing</b><br>(Exc. external virtualisation, encryption) |  |   |   | Yes                                     | Yes   | Yes   |
| <b>Comprehensive Care</b><br>(3 years ECS & Warranty)                        | Yes, included with 2147-SA2, SV2; 9x5 NBD warranty | Alternative optional services available; 9x5 NBD warranty | Alternative optional services available; 9x5 NBD warranty | Yes, optional Service; 9x5 NBD warranty | Yes, included with 9848-AG8, UG8; 24x7 warranty | Yes, included with 9848-AG8, UG8; 24x7 warranty |
| <b>Cloud Analytics with Storage Insights</b>                                 | Yes  | Yes   | Yes   | Yes                                     | Yes   | Yes   |
| <b>Flash Endurance Guarantee</b>   |  | Yes   | Yes   | Yes                                     | Yes   | Yes   |
| <b>IBM Flash Momentum Storage Upgrade Program</b>                            |  | Yes (2072-2H2, 2H4, 3H2, 3H4, 12G, 24G, 92G)              | Yes (2078-4H4, UHB, 12G, 24G, 92G)                        | Yes (2076-824, U7C, 12G, 24G, 92G)      | Yes (9848-AG8, UG8, AFF, A9F)                   | Yes (9848-AG8)                                  |
| <b>On-Demand Pricing (Storage Utility)</b>                                   |  |   | Yes (2078-UHB)  | Yes (2076-U7C)                          | Yes (9848-UG8)                                  |   |
| <b>No Cost Migration</b>   | Yes  | Yes   | Yes   | Yes                                     | Yes   | Yes   |

# IBM FlashWatch FAQ

## Acquisition

### How do I get the High Availability Guarantee?

Your IBM rep will need to use contract [Z126-7810 \(IBM only\)](#). They can obtain more information if needed from Jennifer Ho ([jkho@us.ibm.com](mailto:jkho@us.ibm.com))

### Can a customer or Business Partner perform the installation of the HyperSwap environment and still get the High Availability Guarantee?

No, IBM provides and validates the installation and if needed, provides the remedy.

### Is there an HA Guarantee for Stretch Cluster?

No, the guarantee is only available for HyperSwap configs.

### How do I get a Data Reduction Guarantee

Your IBM rep will need to complete the 2:1 Self-Certified [Z126-8545 \(IBM only\)](#), or 5:1 Flexible [Z126-7957 \(IBM only\)](#) contract *before installation*.

### Does the Data Reduction Guarantee apply to FlashCore Modules as well as Data Reduction Pools?

Yes, the Data Reduction Guarantee does not specify which data reduction technology you should use, just that the workload be capable of being reduced. It covers, compression with FCMs as well as compression and deduplication with DRP.

### Do I have to run the tooling to guarantee more than 2:1 Data Reduction?

Yes, only the 2:1 guarantee is self-certified by the customer.

### How long does the Data Reduction Guarantee last?

90 days from the start of the machine warranty

## Operation

### How do I order ECS for products that don't bundle it?

It'll be in econfig for the FlashSystem 7200 from GA.

### What alternative services are available?

Proactive Support is available through IBM Lab Services.

### Where can I find more information out about Storage Insights?

You can see much more information including how to register, what the security considerations are, and how to set up and use Storage Insights [here](#)

### Are SAS SSD drives covered by Flash Endurance?

Sure, all drives are covered if you're under warranty or HWMA and will be replaced by IBM.

## Migration

### How can I use IBM Flash Momentum?

Contact your IGF rep with your desired configuration. If your IGF rep needs help, he can talk to Neil McGovern ([neil\\_mcgovern@uk.ibm.com](mailto:neil_mcgovern@uk.ibm.com))

### If I use the IBM Flash Momentum, what happens at the end of the second term?

You can get new storage, with a delayed start and take advantage of the program again.

### Do I need to commit to the second term up front?

No, you've full flexibility to make that choice as you approach the end of the first term.

### Do the IBM Flash Momentum terms and conditions apply to existing leases?

No. You can take advantage of the Momentum when you renew, also requesting a delayed start to avoid dual billing if necessary.

### Is the previous Controller Upgrade program available still?

No, that program was only valid for purchases before February 11<sup>th</sup> 2020

### How can I order a system with Cloud-like Pricing?

Purchase a Storage Utility model in econfig. You'll be contacted to agree your specific terms and conditions.

### Where can I find out more about Cloud-like Pricing?

[Here](#)

# Other Resources

## [IBM Spectrum Virtualize FAQ](#)

*Details on the IBM Spectrum Virtualize products, covering IBM FlashSystem family and SAN Volume Controller*

## [IBM FlashSystem Family Overview FAQ](#)

*Overview of the IBM FlashSystem family with guidance on how to select the product that's right for you*

## [IBM FlashWatch FAQ](#)

*Guidance on the IBM FlashWatch programs*

## [IBM Redbooks](#)

*Detailed information on both IBM FlashSystem products and IBM Spectrum Virtualize function*





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