## Business challenge

With consistent growth, Donegal found that demand on its core business systems had increased. How could it keep systems running at the same performance levels with equal or lower operating costs?

## Transformation

As its written premiums rose, so did the corresponding demand on Donegal Insurance Group's core business systems. To ensure sustained performance and stability, the group worked with PSR Information Systems Services and IBM to implement the latest generation IBM® z Systems™ platform—helping keep operations running consistently and costs stable.

## Business benefits

**Ultra-reliable**
platform supports critical applications, keeping operations running

**Stable capacity**
despite sizeable increase in workload helps to offset significant growth

**10% less CPU**
usage enables Donegal to better balance performance and cost

# Donegal Insurance Group

## Supporting consistent growth with an ultra-stable IBM z Systems platform

Headquartered in Marietta, PA, the Donegal Insurance Group is an A.M. Best A-rated regional insurance group that achieved annual gross revenues of over USD 800 million in 2015. The group now consists of nine companies offering property and casualty insurance through a network of approximately 2,400 independent agents in 21 states within the Mid-Atlantic, Mid-Western, New England and Southern regions of the US.

*"There is no second guessing with IBM z Systems—you're not going to find a more reliable platform."*

—Nathan Pfister, Senior Mainframe Systems Programmer, Donegal Insurance Group

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## Meeting growing demand

Donegal has achieved consistent growth both organically and through acquisitions over a period of many years. The group's most recent acquisition, Michigan Insurance Company in 2010, was its largest to date.

Mike Clement, Vice President of IT at Donegal Insurance Group, takes up the story: "Over the last three years, Donegal's growth in direct written premiums and the number of in-force policies have outpaced the industry average. We obviously started to see a corresponding uptick in demand on our core business systems."

Donegal has run its core policy management and billing systems on the IBM zSystems platform for over 10 years. Due to the group's continuing growth, Donegal found that its daily, weekly and monthly batch cycles were beginning to stretch and the residual risk of affecting normal operations was becoming apparent.

Mike Clement elaborates: "We weren't experiencing massive overruns relative to the cycles, but we found that the windows for running jobs were getting tighter. This meant that if an issue occurred, we had less time to correct it and move forward. It is critical to always have a certain amount of operating room, but with more and more policy and billing records to process, we had less time to maneuver. We recognized our need to be proactive and stay ahead of the processing bell curve. That's when we engaged IBM Premier Business Partner PSR and IBM."

## Ahead of the curve

To reduce strain on systems and maintain top-notch performance in the face of continuous growth, Donegal decided to upgrade to the latest IBM z Systems platform.

"We wanted the sustained reliability of z Systems," says Mike Clement. "It is a tried-and-true, ultra-stable platform. We were looking for an opportunity to increase performance through inherent computing architecture advances as opposed to raw MIPS increases which can result in elevated operating costs. We performed a similar move and achieved comparable results in 2011, when we upgraded from the z9 to the z10 platform. So when we reached out to our IBM Business Partner about upgrading, we were only too happy to join the early support program [ESP] for the new IBM System z13s."

Through the IBM ESP, Donegal had the opportunity to evaluate the latest and greatest IBM z Systems platform before its general release.

Nathan Pfister, Senior Mainframe Systems Programmer at Donegal Insurance Group, comments: "PSR Information Systems Services set up the IBM z13s-K01 server at our production site and then worked closely with IBM to run a short test cycle. We had the system up and running in our production environment in less than a month—making us one of the very first companies to run on the IBM z13s."

Mike Clement adds: "We had complete confidence in both IBM and PSR. So much so, in fact, that we switched to the IBM z13s platform during our month-end processing cycle. The implementation went smoothly, and the month-end closing ran as expected. Participating in the ESP has been a fantastic experience."

Today, Donegal runs the IBM z13s at its main site and an IBM zBC12 server with capacity backup at its remote disaster recovery (DR) site. Data from the production site server is stored on IBM DS8870® and IBM System Storage® TS7740 arrays, and replicated to the DR site's identical DS8870 disk storage setup via IBM Global Mirror and TS7720 virtual tape grid. Running as an active/ passive cluster, mission-critical policy and billing data is replicated between the sites asynchronously, protecting Donegal from data loss in the unlikely event of system failure. A side-benefit of Donegal's upgrade to the z13s was a significant increase in read/write storage performance. The group's previous z10™ server had 4 Gb/s FICON cards, and was unable to take advantage of the full 8 Gb/s connection offered by its DS8870 storage system. Today, with the z13s,

Donegal benefits from this higher connection speed, enabling it to move data to and from its core transaction processing systems much faster.

Customer-facing applications depend on Donegal's core policy management and billing systems running uninterrupted, as Mike Clement explains: "All the policy and billing data that customer-facing applications and portals access comes from the z Systems platform. Running two of the most critical business systems, the IBM z13s is the center of our processing—stability and reliability are crucial."

## Rock-solid reliability

For Donegal, maintaining 100 percent availability will always be a top priority. With the IBM z13s, the group can be assured that its core business systems will continue running reliably.

Nathan Pfister comments: "There is no second guessing with IBM z Systems—you're not going to find a more reliable platform. IBM recognizes that we run mission-critical systems on the z13s and that there is no room for error. The IBM team always put their best resources forward and the quality of day-to-day support is beyond superb."

As well as providing the outstanding levels of availability and stability that the group has come to expect from the z Systems platform, Donegal has benefitted from the z13s solution's increased compute capacity.

Mike Clement says: "Despite significant growth in business—and therefore the number of policies and billing records that must be processed—the MIPS figure for our production landscape has remained the same for the past eight years. This clearly shows how the z Systems architecture advances with each new generation,

which helps us to absorb significant growth in transactions. We can now handle bigger workloads within the same timeframes, using the same level of MIPS, but with 10 percent less CPU usage—enabling us to better balance performance and cost. We have also seen decreases in batch job run-times, particularly during month-end closing when there was previously contention for system resources."

He concludes: "The architecture advancement in the latest generation z13s platform is clear, but reliability remains one of the most important factors for us. We have been running our most critical systems on IBM z Systems for many years, as any adverse impact on daily production must be avoided at all costs. We have put the z13s at the heart of our operations because we know we can rely on it to support our continuing future growth."

## Connect with us

## Take the next step

Based in Boston, MA, PSR Information Systems Services is the only IBM Premier Business Partner whose singular focus is z Systems and z attached storage. With this expertise, PSR helps customers get the most out of their mainframe investment. To learn more about PSR Information Systems and Services, please visit: psrinfo.com

To learn more about IBM z Systems, please contact your IBM representative or IBM Business Partner, or visit the following website: **ibm.com**/systems/z/software