The yearly march of the emperor penguins is a journey involving fierce storms, long waits, and multiple arduous trips from the ocean to the Antarctic breeding grounds over the autumn and winter months. The journey is dangerous, with risks of starvation, exhaustion, and predation.

Data migration isn’t much like the movement of a penguin colony. And maybe that’s why many people choose to start over from scratch when they move their help desk from one system to another. However, there are several reasons retaining that historical information is important. But whether you archive it or choose to migrate it, with a strategy in place and the right amount of planning, your data won’t get eaten by a leopard seal, at least.
There are two factors that influence the decision to abandon or migrate any of the historical data from your help desk system—the value of the data and how much of it there is.

The volume of your data can be a pretty obvious constraint, if you know what the technical limitations are: Are there storage limitations? Will there be performance degradations when starting with a significant number of records? As an example consider a help desk system with 250,000 tickets, each with an average of three attachments—avatars, email signatures, screenshots. That could be around 1TB of data that must be stored.

Determining the value of data is more difficult. You’ll need to understand who uses it and what happens to it. If you’ve got a legal requirement to store your data intact, much like a rolling history of tax records, you don’t have any options. But if migration is for reference or reporting needs, you can make some inquiries with stakeholders and so you can spend
your migration budget more wisely. You should trace regular reports back to the recipients and ask whether they’re still relevant. It’s not unheard of to find reports being produced for people that no longer work at the organization. For the report owners that you can’t track down, try turning those reports off in your current system and listen for the screams. When it comes to keeping historical records for the organizational knowledge within, ask those people who use your current help desk system if they often refer back to past tickets. If they don’t, then you can probably
It’s fairly common for organizations to migrate open tickets and other live data and archive the rest. If you intend to archive any part of your data, you’ve still got the same storage considerations to make. It’s not just about how many penguins can fit on that floating sheet of ice; will it be useful to know which particular penguins are there? And if you want to retrieve one, how will you do so? In other words, if you want your archived data to be searchable, that may influence the format.
you store it in—CSV, SQL, or something else. It's also worth documenting the search-and-retrieval process and educating those who may need to access that archived data in the future. It's a small amount of time invested up-front that will save you from a potential bottleneck down the track.

**PHASING OUT THE OLD SYSTEM**

If your migration plan involves running the old and new systems concurrently for a while, you need a process to “starve” your legacy help desk over the period of the migration. Gradual data starvation works well when your help desk generates support requests via email. We all like to think we're capable of multitasking, but it can become confusing to work across two similar systems at the same time. You can make the process easier by adding rules to your corporate email server to automatically route conversations from the legacy system to the old help desk and new inquiries to the new help desk. Commit a certain number of your support agents to handling the tickets on the old system until they've eventually been closed off.
Migrating your help desk data may be just one piece of a transition program, but it’s a big project in itself that requires the appropriate planning and resources. Unfortunately, there’s no one-size-fits-all, push-button formula. That said, a help desk migration will typically follow a similar set of steps.

P is for penguin. It’s also a good way to explain the migration strategy so you’ll remember it.
**PLANNING**

To understand the scope of your migration project, you have to know where your legacy help desk data is. Sounds obvious, I know, and the answer could be as simple as “in the current help desk system.” If your help desk system is self-contained, then that’s all there is to it, but if you pull data from any other systems into your help desk, or if you send data from the help desk to any other systems, you’ll need to map out those relationships.

Unless you have a tool that stores and automatically updates this information, you’ll have to do this manually, and this could well be the first time your legacy system has ever been documented. If it’s your infrastructure, you can scan for network traffic and activity to detect relationships to other servers and applications. You can also ask around—the people who performed the original installation might even be able to supply you with details on known dependencies. You’ll have to account for all the data and infrastructure dependencies so you can manage them appropriately. Documenting your existing system and preparing for the migration itself takes time, so make sure you allow enough of it in your project estimates.

Speaking of project plans and estimates, be prepared for the costs of running two systems in parallel while you migrate your data and transition your staff and customers. You also want to avoid being constrained by the license expiring on your legacy system before you’re prepared to shut it down.
2. PREPARATION

Migration of help desk data is never a simple lift-and-shift exercise, nor should it be. Along with replicating mistakes in data, you could potentially be replicating mistakes in process. A new system provides an opportunity to audit your data quality and business processes. Take the time to refresh your business processes so you can have your new system configured appropriately before the migration. When you’ve analyzed and defined the data structure of the target system, analyze the data structure of the legacy system. This, and your data mappings, is the information that’ll help you determine how to extract the data you need in a way that makes it easier to import. Often it’ll be the unattractive but very portable CSV format that’ll do the best job.

Another consideration sometimes overlooked in the early stages is the licensing requirements of the target system. If you’re moving historical data that contains tickets closed by staff that have moved on, you may need to arrange a temporary increase in agent licences in the new help desk. When migration is complete and all tickets by legacy agents have been closed, you can then remove the temporary licenses.

3. PHASES

Like the penguins shuffling back and forth to the sea for fish to feed to their fluffy, grey offspring, data migration is an iterative process. A test instance or sandbox environment gives you a safe place to conduct migration testing. Migrate into your sandbox to ensure your
mappings are correct and your data is consistent. If it’s not quite right, tweak it and test again. You’ll probably do that a few times before running the migration in your live environment.

Bear in mind, there’ll be data dependencies within the new help desk requiring the data to come across in a particular order. Typically, it’ll start with user data, then organizations and groups, ticket fields, any custom forms, and finally the tickets themselves.

There may be an API rate limit, or some other technical constraint, to be aware of too. A rate limit is applied to system requests so the application remains usable, and is one reason for the phased approach. Another reason for running your migration in batches is that by moving closed tickets first and open tickets last, help desk staff can continue working on them while a potentially long data migration is happening in the background.

POST-MIGRATION

Your help desk migration project doesn’t finish when the last ticket is imported. If you’ve migrated your knowledge articles, too, you’ll have to run a link audit to update and rebuild any macros that link to the previous knowledge base. Your newly imported open and pending tickets may also have deprecated links that need to be fixed. Before shutting down the old system profile your data again—run the required reports from the new help desk system this time—to ensure all stakeholders are getting
the information they need. It can be helpful to compare the before and after reports side-by-side to guarantee consistent data.

Fortunately, unlike the penguins, help desk migrations don’t happen as annual events in a single organization with all those moving parts, nobody would want them to. But with adequate planning and preparation, you can avoid the most treacherous parts you might have come to expect from such a project.

NEED HELP WITH MIGRATING EXISTING HELP DESK DATA TO ZENDESK?
Our developer guide includes helpful api documentation, and this forum post describes how to achieve some of the basics. We also have a professional services team and experienced partners ready to assist. Contact your account manager for details.