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CARTA RESOURCES

A guide to the $100k rule

The $100K ISO limit (also known as the $100K rule) prevents employees from receiving more than $100K worth of exercisable incentive stock options (ISOs) in a year.

Incentive stock options (ISOs), as opposed to non-qualified stock options (NSOs), qualify for favorable tax treatment by the IRS. The $100K ISO limit is an effort to prevent abuse of this tax benefit. Anything in excess of the $100K limit is treated as NSOs.

To comply with the $100K rule, you can divide option grants that exceed the $100K threshold into ISO and NSO portions. This division is commonly called an ISO/NSO split. With Carta, you don't have to manually check that each of your grants follows the $100K rule. With all of your cap table data in Carta, our platform automatically takes care of ISO/NSO splits for you.

It's important to understand when the $100K rule triggers and plan ahead. After you issue an equity grant, it can be difficult to change or amend the grant. This guide will walk you through some examples of the $100K rule. We've included simple examples like a single grant, as well as more complex scenarios like multiple grants and cancelled or modified grants.

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A simple $100K limit example: A single grant

An employee receives an option grant with the following details:

- Options granted: 120,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: Yes

According to the $100K rule, this ISO grant could be split in 2019. On 3/1/2019, 30,000 options—a quarter of the grant—become exercisable based on the one-year vesting cliff date. Over the remaining nine months of the calendar year, 22,500 shares become exercisable (because 2,500 grants vest in each additional month). At an FMV of $2.50 per share, the value of the 52,500 exercisable shares is $131,250.00 in 2019, which exceeds the $100,000 ISO treatment limit.

Year	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	-	-	No
2019	52,500	$ 131,250.00	Yes
2020	30,000	$ 75,000.00	No
2021	30,000	$ 75,000.00	No
2022	7,500	$ 18,750.00	No
Total	120,000	$ 300,000.00	

A portion of the grant could be issued as NSOs in 2019 to help the company and employee comply with the $100K rule. In this example, 40,000 options are issued as ISOs and 12,500 options are issued as NSOs in 2019. The ISO portion of the grant has a value of $100,000 (40,000 shares × $2.50 FMV), which satisfies the $100K rule.

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Simple $100K limit example continued

	ISO treatment		NSO treatment		Total grant	
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-
2019	40,000	$ 100,000	12,500	$ 31,250	52,500	$ 131,250
2020	30,000	$ 75,000	-	-	30,000	$ 75,000
2021	30,000	$ 75,000	-	-	30,000	$ 75,000
2022	7,500	$ 18,750	-	-	7,500	$ 18,750
Total	107,500	$ 268,750	12,500	$ 31,250	120,000	$ 300,000

In this situation, the employee still has the same number of options and the same vesting schedule, but the ISO/NSO split clarifies the tax obligations on each portion of the grant for that year.

Many equity grants, like this example, include a one-year cliff as part of the vesting schedule. However, one-year vesting cliffs can unintentionally trigger the $100K rule because a large number of shares become exercisable in a short span of time. Some Carta customers create custom vesting schedules to maximize the number of ISO options in a grant.

→ **Takeaway:** Watch out for one-year cliffs—they frequently put employees over the $100K limit.

A single grant split multiple times

Depending on the number of options and FMV, a grant could be split across multiple years.

Example grant:

- Options granted: 200,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: No

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Single grant split multiple times example continued

In this case, the grant should be split in 2019, 2020, and 2021.

Year	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	-	-	No
2019	87,500	$ 218,750.00	Yes
2020	50,000	$ 125,000.00	Yes
2021	50,000	$ 125,000.00	Yes
2022	12,500	$ 31,250.00	No
Total	200,000	$ 500,000.00	

To ease compliance with the ISO $100K rule, portions of the grant in those years should be split into both ISOs and NSOs:

	ISO treatment		NSO treatment		Total grant	
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-
2019	40,000	$ 100,000	47,500	$ 118,750	87,500	$ 218,750
2020	40,000	$ 100,000	10,000	$ 25,000	50,000	$ 125,000
2021	40,000	$ 100,000	10,000	$ 25,000	50,000	$ 125,000
2022	12,500	$ 31,250	-	-	12,500	$ 31,250
Total	132,500	$ 331,250	67,500	$ 168,750	120,000	$ 500,000

→ **Takeaway:** Be sure to look at the exercisable value for each year of the grant to see whether it needs to be split multiple times.

A single grant with early exercising

Grants that are early exercisable allow the grantholder to exercise options before they vest.

- Options granted: 120,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: No

In this case, the exercisable value is $150,000 and exceeds the $100K ISO limit in the year the grant was issued:

Year	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	150,000	$ 150,000.00	Yes
2019	-	-	No
2020	-	-	No
2021	-	-	No
2022	-	-	No
Total	150,000	$ 150,000.00	

To ease compliance with the $100K rule, the option grant could be split into ISO and NSO portions:

	ISO treatment		NSO treatment		Total grant	
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	100,000	$ 100,000	50,000	$ 50,000	150,000	$ 150,000
2019	-	-	-	-	-	-
2020	-	-	-	-	-	-
2021	-	-	-	-	-	-
2022	-	-	-	-	-	-
Total	100,000	$ 100,000	50,000	$ 50,000	150,000	$ 150,000

Example continues on next page

→ **Takeaway:** Many early exercisable grants end up exceeding the $100K ISO threshold. Splitting them into ISO and NSO portions up front could prevent headaches later on.

Multiple grants

The $100K limit applies to the total value of all ISO grants held by an employee under all plans from the employer (and its related corporations, or subsidiaries). When multiple grants are given to one employee, this can trigger the $100K rule.

Grant A:

- Options granted: 100,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $1.00
- Early exercisable: No

Grant B:

- Options granted: 50,000 shares
- Grant date: 3/1/2019
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $4.00
- Early exercisable: No

At first glance, it might appear that the $100K ISO threshold is not exceeded because neither grant by itself exceeds it:

Grant A

Year	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	-	-	No
2019	43,750	$ 43,750	No
2020	25,000	$ 25,000	No
2021	25,000	$ 25,000	No
2022	6,250	$ 6,250	No
2023	-	-	No
Total	100,000	$ 100,000	

Grant B

Year	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	-	-	No
2019	-	-	No
2020	21,875	$ 87,500	No
2021	12,500	$ 50,000	No
2022	12,500	$ 50,000	No
2023	3,125	$ 12,500	No
Total	50,000	$ 200,000	

However, when looking at all grants, the $100K threshold is exceeded in 2020. The exercisable value of Grant A (25,000 exercisable options × $1.00 FMV = $25,000) and Grant B (21,875 exercisable options × $4.00 FMV = $87,500) in that year exceed $100,000 when combined ($25,000 + $87,500 = $112,500).

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Multiple grants example continued

	Grant A		Grant B		Total		
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	ISO / NSO Split Required
2018	-	-	-	-	-	-	No
2019	43,750	$ 43,750	-	-	43,750	$ 43,750	No
2020	25,000	$ 25,000	21,875	$ 87,500	46,875	$ 112,500	Yes
2021	25,000	$ 25,000	12,500	$ 50,000	37,500	$ 75,000	No
2022	6,250	$ 6,250	12,500	$ 50,000	18,750	$ 56,250	No
2023	-	-	3,125	$ 12,500	3,125	$ 12,500	No
Total	100,000	$ 100,000	50,000	$ 200,000	150,000	$ 300,000	

According to CFR Section 1.422-4(b)(3), "options are taken into consideration in the order in which they are granted." Because Grant B (3/1/2019) was given after Grant A (3/1/2018), Grant B can be split:

	Grant A		Grant B				Total	
	ISO		ISO		NSO			
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-	-	-
2019	43,750	$ 43,750	-	-	-	-	43,750	$ 43,750
2020	25,000	$ 25,000	18,750	$ 75,000	3,125	$ 12,500	46,875	$ 112,500
2021	25,000	$ 25,000	12,500	$ 50,000	-	-	37,500	$ 75,000
2022	6,250	$ 6,250	12,500	$ 50,000	-	-	18,750	$ 56,250
2023	-	-	3,125	$ 12,500	-	-	3,125	$ 12,500
Total	100,000	$ 100,000	46,875	$ 187,500	3,125	$ 12,500	150,000	$ 300,000

→ **Takeaway:** Look across all grants a stakeholder has when making sure you're following the $100K rule.

Multiple grants and grant dates

With multiple grants across multiple dates, the rule remains the same: look at the grant date to figure out which grant to split. Even if we changed our previous example to give Grant A a four-year vesting cliff (all 100,000 options vest and become exercisable in 2022), Grant B could still be split first:

	Grant A		Grant B				Total	
	ISO		ISO		NSO			
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-
2020	-	-	21,875	$ 87,500	-	-	21,875	$ 87,500
2021	-	-	12,500	$ 50,000	-	-	12,500	$ 50,000
2022	100,000	$ 100,000	-	-	12,500	$ 50,000	112,500	$ 150,000
2023	-	-	3,125	$ 12,500	-	-	3,125	$ 12,500
Total	100,000	$ 100,000	37,500	$ 150,000	12,500	$ 50,000	150,000	$ 300,000

→ **Takeaway**: Look to the last-issued grant when deciding on ISO/NSO split.

Cancellation of grants

Canceled grants can affect whether an employee hits the $100K ISO limit. In this example, Grant A is canceled in 2020.

Grant A:

- Options granted: 100,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $1.00
- Early exercisable: No

Grant B:

- Options granted: 50,000 shares
- Grant date: 3/1/2019
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $4.00
- Early exercisable: No

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Cancellation of grants example continued

Year	Grant A Shares exercisable	Grant A Value exercisable	Grant B Shares exercisable	Grant B Value exercisable	Total Shares exercisable	Total Value exercisable	ISO / NSO Split Required
2018	-	-	-	-	-	-	No
2019	43,750	$ 43,750	-	-	43,750	$ 43,750	No
2020	25,000	$ 25,000	21,875	$ 87,500	46,875	$ 112,500	Yes
2021	25,000	$ 25,000	12,500	$ 50,000	37,500	$ 75,000	No
2022	6,250	$ 6,250	12,500	$ 50,000	18,750	$ 56,250	No
2023	-	-	3,125	$ 12,500	3,125	$ 12,500	No
Total	100,000	$ 100,000	50,000	$ 200,000	150,000	$ 300,000	

According to CFR Section 1.422-4(b)(5)(ii), options will be treated as outstanding according to the original terms until the end of the calendar year when they would have been first exercisable. This means that for 2020, Grant B still has an ISO/NSO split in tax treatment as described. However, for calendar years after the cancellation, Grant A would not be included in the total ISO value calculation.

Year	Grant A Shares exercisable	Grant A Value exercisable	Grant B Shares exercisable	Grant B Value exercisable	Total Shares exercisable	Total Value exercisable	ISO / NSO Split Required
2018	-	-	-	-	-	-	No
2019	43,750	$ 43,750	-	-	43,750	$ 43,750	No
2020	25,000	$ 25,000	21,875	$ 87,500	46,875	$ 112,500	Yes
2021	~~25,000~~	~~$ 25,000~~	12,500	$ 50,000	12,500	$ 50,000	No
2022	~~6,250~~	~~$ 6,250~~	12,500	$ 50,000	12,500	$ 50,000	No
2023	-	-	3,125	$ 12,500	3,125	$ 12,500	No
Total	68,750	$ 68,750	50,000	$ 200,000	118,750	$ 268,750	

→ **Takeaway:** Canceling grants can complicate things. Before canceling, make sure you know how it'll impact your compliance with the $100K rule.

Modifications

If you want to modify the terms of your equity grants, e.g., change the post termination exercise (PTE) terms or reprice options, it's important to know how these changes could affect whether you're complying with the $100K rule. Here are a couple of examples of modifications.

Post Termination Exercise (PTE) period modifications

PTE periods are the amount of time employees have to exercise options after they leave the company. Companies determine how long of a PTE period they want to offer in their equity plan documents. While most companies used to offer 90-day periods, many companies now offer longer, more employee-friendly windows.

Example grant:

- Options granted: 120,000
- Grant date: 3/1/2018
- Vesting schedules: monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: No
- PTE period: **Three months**

This grant gets split in 2019 (see A simple $100K limit example: A single grant).

	ISO treatment		NSO treatment		Total grant	
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-
2019	40,000	$ 100,000	12,500	$ 31,250	52,500	$ 131,250
2020	30,000	$ 75,000	-	-	30,000	$ 75,000
2021	30,000	$ 75,000	-	-	30,000	$ 75,000
2022	7,500	$ 18,750	-	-	7,500	$ 18,750
Total	107,500	$ 268,750	12,500	$ 31,250	120,000	$ 300,000

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PTE modifications example continued

The employee continues to work at the company into 2020. On 6/1/2020, the company decides to extend its PTE period from three months to three years, giving employees additional time to exercise their shares after they leave the company. The company modifies the employee's equity grant accordingly, and the grant now looks like this:

- Options granted: 120,000
- Grant date: 3/1/2018
- Vesting schedules: monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: No
- PTE period: **Three years (modified)**

This change benefits the employee, so the company should treat the modification as if two things occurred: (1) the original equity grant was canceled and (2) a new equity grant was issued.

From the cancellation example above (**Cancellation of grants**), we know that the amount vested from the original grant in calendar year 2020 will count toward the $100K ISO limit, even though it was canceled. In the eyes of the tax authorities, $75,000 of exercisable value has already been attributed to the employee for the "canceled" portion of the grant.

The employee also "receives" a new grant. Thus, the IRS will look at all exercisable shares that become available in 2020, including those that became available in previous years. For the modified grant, 82,500 exercisable shares become exercisable: 52,500 from 2019 and 30,000 from 2020. These 82,500 represent $206,250 in exercisable value (82,500 x $2.50), exceeding the $100K limit. Because $75,000 is already attributed to the canceled grant, $25,000 of the modified grant can be set aside for the modified grant, or 10,000 shares.

The ISO/NSO split would then look like this:

	"Canceled" Grant				Modified Grant				Total	
	ISO		NSO		ISO		NSO			
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-	-	-	-	-
2019	40,000	$ 100,000	12,500	$ 31,250	-	-	-	-	52,500	$ 131,250
2020	30,000	$ 75,000	-	-	10,000	$25,000	72,500	$ 181,250	112,500	$ 281,250
2021	~~30,000~~	~~$ 75,000~~	-	-	30,000	$ 75,000	-	-	30,000	$ 75,000
2022	~~7,500~~	~~$ 18,750~~	-	-	7,500	$ 18,750	-	-	7,500	$ 18,750
2023	-	-	-	-	-	-	-	-	-	-
Total	70,000	$ 175,000	12,500	$ 31,250	47,500	$ 118,750	72,500	$ 181,250	202,500	$ 506,250

Example continues on next page

It's worth noting that the modified PTE terms meant to help employees resulted in 20,000 fewer ISO-qualifying options for this employee in 2020.

→ **Takeaway:** Modifying PTE terms can end up subjecting employees to higher tax obligations (even if it's meant to help).

Repricing modifications

Sometimes companies modify option grants by changing the exercise price. This is also known as repricing and typically occurs when a company's FMV has decreased.

When repricing, companies should note whether the exercise price is set below or at the new FMV.

"In-the-money" means that the exercise price is lower than the FMV. For example, if an option's exercise price is $2.50 and the FMV is $3.00, then the option holder can exercise their options at $2.50 / share to receive shares worth $3.00. The tax code specifically prohibits options from being treated as ISOs if they are issued or modified to be in-the-money. Instead, they will be treated as NSOs.

Example grant:

- Options granted: 120,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): $2.50
- Early exercisable: No

In 2020, the company's FMV declines to $1.25 per share. The employee, who owns shares exercisable at $2.50, now has "out-of-money" options. To benefit the employees and reset incentives, the company decides to reprice its equity grants:

Example grant:

- Options granted: 120,000 shares
- Grant date: 3/1/2018
- Vesting schedule: Monthly for four years with a one-year cliff
- Fair market value (FMV): **$1.25 (modified)**
- Early exercisable: No

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Repricing modifications example continued

A lower FMV is a benefit to the employee, so this change will be considered a modification. In this scenario, the company cancels the original grant and issues a modified grant. In 2020, $75,000 of exercisable value was issued in the canceled grant, leaving $25,000 in exercisable ISO value available in 2020 before triggering the $100K threshold. Because the FMV is now $1.25 per share, 20,000 options can be treated as ISOs for the modified grant:

	"Canceled" Grant				Modified Grant				Total	
	ISO		NSO		ISO		NSO			
Year	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable	Shares exercisable	Value exercisable
2018	-	-	-	-	-	-	-	-	-	-
2019	40,000	$ 100,000	12,500	$ 31,250	-	-	-	-	52,500	$ 131,250
2020	30,000	$ 75,000	-	-	20,000	$ 25,000	62,500	$ 78,125	112,500	$ 178,125
2021	~~30,000~~	~~$ 75,000~~	-	-	30,000	$ 37,500	-	-	30,000	$ 37,500
2022	~~7,500~~	~~$ 18,750~~	-	-	7,500	$ 9,375	-	-	7,500	$ 9,375
2023	-	-	-	-	-	-	-	-	-	-
Total	70,000	$ 175,000	12,500	$ 31,250	57,500	$ 71,865	62,500	$ 78,125	202,500	$ 356,250

However, if the exercise price is repriced to less than the FMV (e.g. $1.00), the whole portion will likely be treated as NSOs. Generally, companies set the exercise price at the current FMV to avoid this.

→ **Takeaway:** If you want to lower the exercise price of a grant by canceling and reissuing the grant, it could trigger the $100K ISO threshold.

Bottom line

The $100K rule is complicated, and it can take a lot of time ensuring each grant you issue follows the rule. Using Carta to issue your grants can save you time, as we'll track and help facilitate ISO/NSO splits for you.

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