onnet

Odoo Sequence, System Parameters and Email Configuration

onnet
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01

Sequence

What and Why?

- Generate unique value for a field (following some predefined rules or patterns) when a new record is created.
- ir.sequence built in model helps generate auto increment field (sequence number).

01
Sequence

Sequence Numbering
Prefix and suffix ranges

Resequence in Odoo14
How to resequence
Resequence in big data

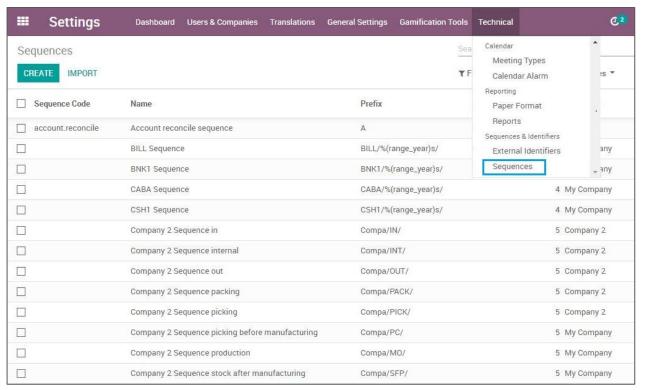**How to use sequence for your own field**

Sequence Numbering

Sequence Numbering

Menu: Settings / Technical / Sequences and Identifiers / Sequences

- Make sure you know which sequence is used for which model and field

Sequence Numbering
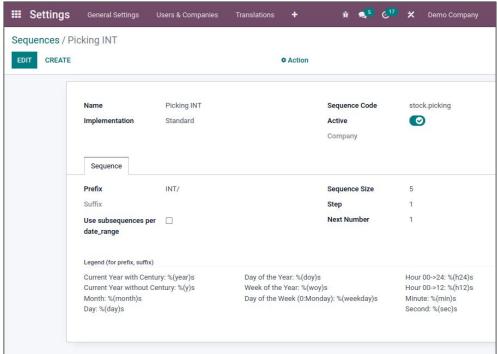
Name: only for information

Sequence Code: used for dev or in automated action

Implementation:

-   Standard: fast gaps-allowed PostgreSQL sequence
-   No gap: ensures that each previous sequence number has been assigned already (still can be gap, slower)

Sequence Numbering

Company

Prefix and Suffix: a combination of fixed elements and variables
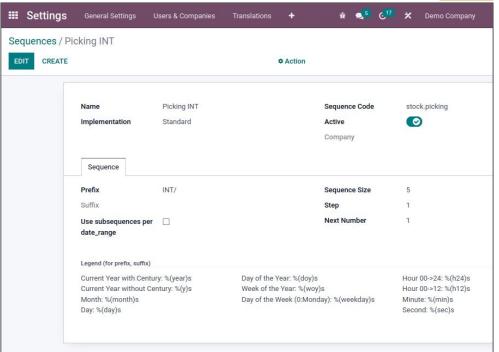
Subsequence per date_range

Sequence Size: needs to be large enough to cover the expected number of documents

Step

Next number: It could be set to something else manually and automatically updated as documents are created

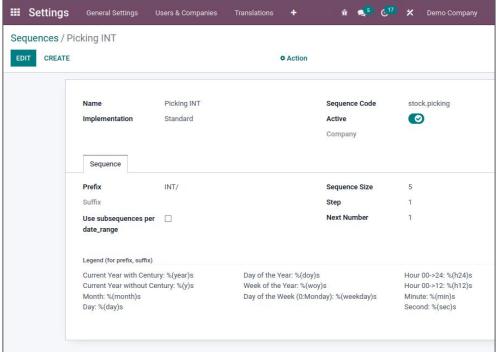**Sequence Range**: allow you to restart numbering each month

Sequence Numbering

Prefix and Suffix

The document number will be:

- Prefix (if defined)
- Sequence number
- Suffix (if defined)

Sequence Numbering

Prefix and Suffix

The document number will be:

- Prefix (if defined)

- Sequence number

- Suffix (if defined)

example

WH/INT/%(year)s/

Legend (for prefix, suffix)

- Current year with century: %(year)s

- Current Year without Century: %(y)s

- Month: %(month)s

- Day: %(day)s

- Day of the Year: %(doy)s

- Week of the Year: %(woy)s

- Day of the Week (0:Monday): %(weekday)s

- Hour 00->24: %(h24)s

- Hour 00->12: %(h12)s

- Minute: %(min)s

- Second: %(sec)s

When subsequences per date range are used, you can prefix variables with 'range_' to use the beginning of the range instead of the current date, e.g. %(range_year)s instead of %(year)s.
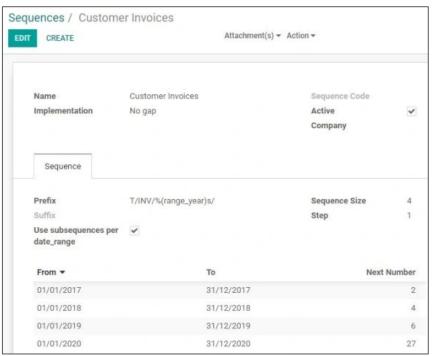
Sequence Numbering

Ranges

To have numbering reset for each year rather than a continually increasing number.

To set this up:

- Tick the box: Use subsequences per date_range
- Enter periods and a starting number (optional if using year)
- Use range_year or range_month (etc.) in the prefix

If you don't create a date range, Odoo will automatically create one for the calendar year (as per the above example)

Sequences / Customer Invoices

EDIT   CREATE   Attachment(s) ▾   Action ▾

Name	Customer Invoices	Sequence Code	
Implementation	No gap	Active	✔
		Company	

Sequence

Prefix	T/INV/%(range_year)s/	Sequence Size	4
Suffix		Step	1
Use subsequences per date_range	✔		

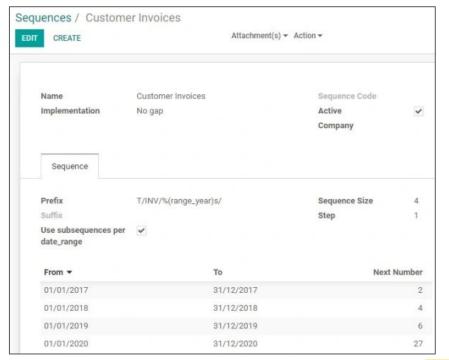| From ▾	To	Next Number
01/01/2017	31/12/2017	2
01/01/2018	31/12/2018	4
01/01/2019	31/12/2019	6
01/01/2020	31/12/2020	27

Sequence Numbering

If you are running out of numbers

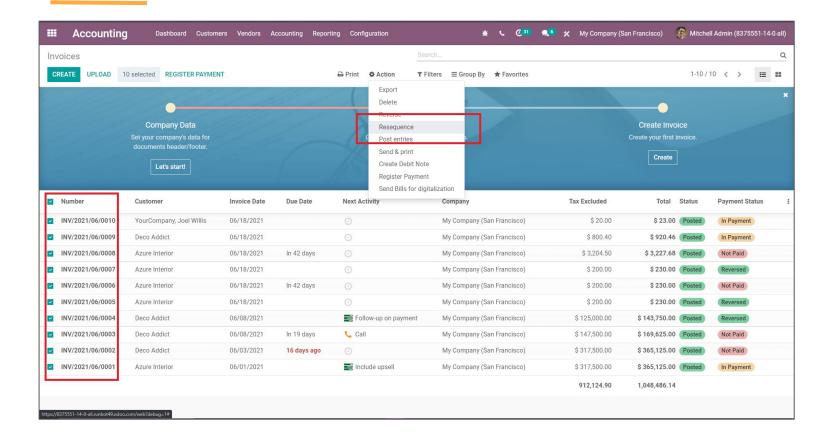Tt is possible to change the numbering system later, and there are several options

- Change the prefix
- Add a suffix
- Increase the sequence size
- Start using year with sub-sequences

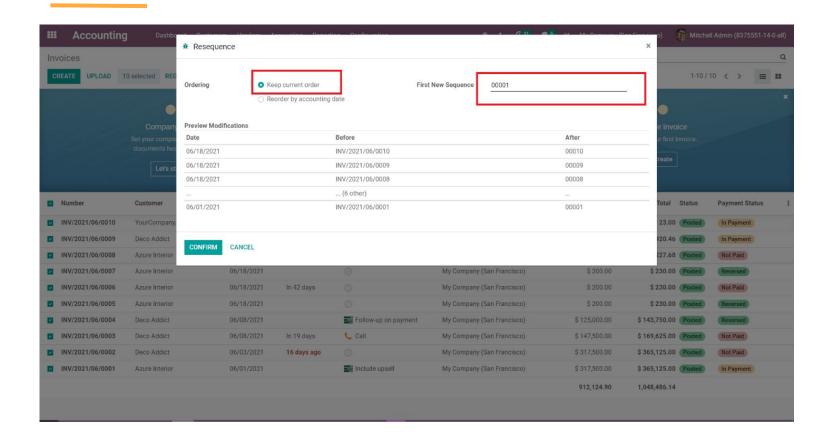# Resequence in account.move (since Odoo14)

Resequence in account.move (since Odoo14)

Notes for Resequence

- Simple configuration, decrease technical action
- Auto expand sequence size
- Hard to resequence with big data

How to use your own sequence

Steps:
1. Create record of ir.sequence model (admin, xml)
2. Create a new field in your model, you can give any name (studio, code)
3. Override Odoo create method or trigger an automated action on create event. (automated action, code)

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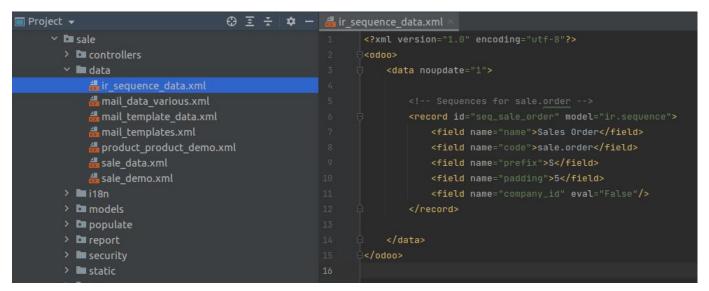
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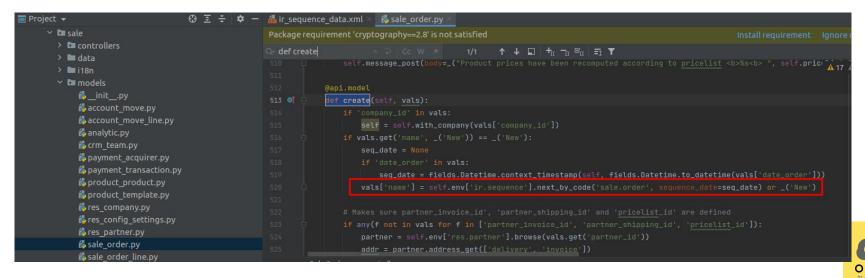

Set sequence number for Sales Order

Model	Sale Order		Action To Do	Execute Python Code
Trigger Condition	On Creation		Available on the Website	☐
Apply on	Match all records		Model	
	→ 24 RECORD(S)			

Python Code | Help

```
for record in records:
    if record.x_studio_order_type == "Consumer":
        ref = env['ir.sequence'].next_by_code('consumer.sale.order')
        record['name'] = ref
```

02
System Parameters

What and Why?

- System parameter in odoo is a model with a key value pair format that is **only used for storing the configuration**
- **ir.config_parameter**
- Usually used to enable or disable a certain feature, store the default values etc.
- We can use the system parameter freely for anything in our odoo application.
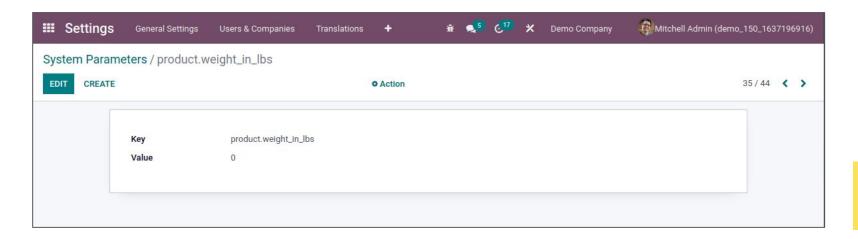
Odoo System Paramter

Settings / Technical / Parameters / System Parameters

Key: any text, as long as it is unique per database. Always try to use lowercase letters and avoid spaces or special characters.

Value: string type, so we can fill this field with any value as long as we can process it in python.

Odoo System Paramter

Settings / Technical / Parameters / System Parameters

Key: any text, as long as it is unique per database. Always try to use lowercase letters and avoid spaces or special characters.

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```xml
<record id="allowed_warehouse_parameter" model="ir.config_parameter">
    <field name="key">allowed_warehouse</field>
    <field name="value">2,5,9</field>
</record>
```

Odoo System Paramter

We can also place the system parameter in the Configuration or the Settings form
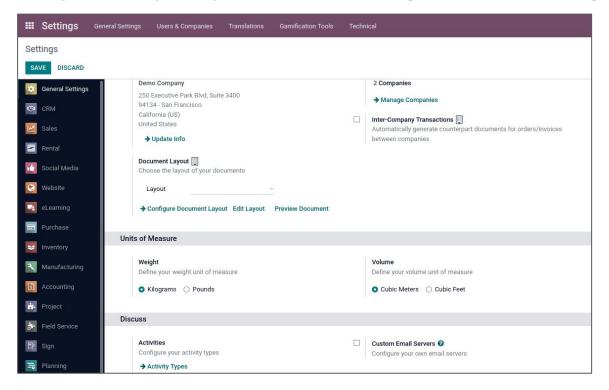
```python
class ResConfigSettings(models.TransientModel):
    _inherit = 'res.config.settings'

    product_volume_volume_in_cubic_feet = fields.Selection(
        [('0', 'Cubic Meters'), ('1', 'Cubic Feet')],
        'Volume unit of measure',
        config_parameter='product.volume_in_cubic_feet',
        default='0')
```
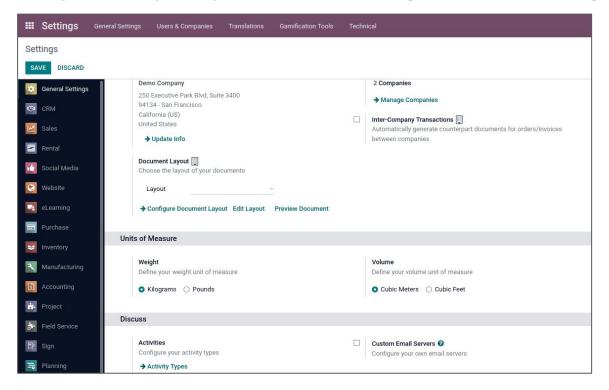
Odoo System Paramter

We can also place the system parameter in the Configuration or the Settings form

Odoo System Paramter

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Odoo System Paramter

Read/Change System Parameter

```python
# product_template.py
...
@api.model
  def _get_weight_uom_id_from_ir_config_parameter(self):
      """ Get the unit of measure to interpret the `weight` field. By default, we considerer
      that weights are expressed in kilograms. Users can configure to express them in pounds
      by adding an ir.config_parameter record with "product.product_weight_in_lbs" as key
      and "1" as value.
      """
      product_weight_in_lbs_param = self.env['ir.config_parameter'].sudo().get_param('product.weight_in_lbs')
      if product_weight_in_lbs_param == '1':
          return self.env.ref('uom.product_uom_lb')
      else:
          return self.env.ref('uom.product_uom_kgm')
```

odoo

03

**Email
Configuration**

What and Why?

- Odoo sets up its own mail servers for your database (if you are Odoo Online and Odoo.sh user)
- Odoo on-premise users don't benefit from an out-of-the-box solution to send and receive emails in Odoo

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Email Configuration

Outgoing Mail Server

Settings / Technical / Email / Outgoing Mail Server

Description	Gmail Outgoing Server	Priority	10

Connection Information

SMTP Server	smtp.gmail.com	SMTP Port	465

Security and Authentication

Connection Security		SSL/TLS	▼
Username			
Password			

🖥 Test Connection

Q&A